

From The STAFF

W.T.F.D.A. Headquarters, P.O. Box 97, Calumet City, IL 60409

WTFDA CONVENTION COMING SOON...We hope to see you in Staten Island, NY for the 1982 WTFDA Convention. Staten Island, part of the New York City metro area, is easily accessible from just about any part of the continent. Closest major airport is Newark International, only minutes away from the convention site. Act now! Plan to visit the N.Y.C. area on July 30th, 31st, and August 1st. Use the convention form inserted in this month's VUD.

CAN YOU HELP?...The N.Y.C. area is, of course, very large, and we expect that DXers will be arriving at many points. We're looking for area DXers to help with the transportation. If you'd like to help, please contact host Jerry Pulice, 3201 Richmond Road, Staten Island, NY 10306. Telephone: (212) 979-3577. If you'll be driving in, and can help shuttle someone along the way, please contact Jerry.

VOLUNTEERS URGENTLY NEEDED...Effective at the end of July, John Zondlo will be stepping down as editor of MAILBOX, WTFDA Circulation Manager, and ANARC representative from WTFDA. There's no way to even begin to calculate all that JZ has done for WTFDA for the past seven years or so, devoting a great amount of time and tireless effort to club matters. He'll be greatly missed, and we may need two or even three DXer-volunteers to replace him. If you can help to fill one or more of these positions, please write HQ as soon as possible. Chief duties of Circulation Manager include preparing mailing labels for the VUD, and we'd like to hear especially from anyone who's into computers who may be able to take on this task.

WHAT WTFDA IS...AND ISN'T...WTFDA is: a hobby organization, staffed by volunteers. Club duties are accomplished in the spare time of the staffer. Club officials often put out their own money to help finance the club, such as phone bills, which often get quite high. Your understanding of our situation is appreciated. WTFDA isn't: a multi-national corporation, with paid, full-time staff. It isn't rich (though not poor). It isn't in control of the postal disservice, which has been messing us up quite a bit lately.

POSTAL PROBLEMS...The March VUDs were mailed in mid-March...but one member reports his VUD being postmarked April 14th, and another said he never got it. If you've had similar problems, let us know.

WHO DOES WHAT...If you have a problem in getting your VUD, let distribution manager Mike Hogan know, either by letter or card to Cal City (address above), or by calling (312) 868-4392. John Zondlo does not mail the VUDs, he only types the labels. If you have an address change or consistently have the wrong address appearing on your label, contact John through Box 97 above, or (405) 681-5991. Don't call either one collect.

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ON THE COVER: Georgia Public Television, courtesy of Nick Lombardi



MAILBOX

John Zondlo
1308 SW 74th, Apt. 421
Oklahoma City, OK 73159
(405) 681-5991
Deadline: 5th

Renewals:

Ernie Cooper, Richard Eckman, Ron LeBlanc, Fred Nordquist, Bob Seybold, Edwin Tharp.

Address Changes:

Greg Ledbetter-400 N. 40th Ave., Lot B-18-Hattiesburg, MS 39401
Wince Pearlringi IT-USF Forrestal (CV59)-OM Division-PFO Miami, FL 34080

Renewals Due in July:

Jim Albrecht, Gerald Barkow, Saul Chernos, Mike Dalton, Robert Demers, Patrick Durkin, Jr., John Ebeling, Richard Faloney, Mike Hardester, Bill Heusmann, Roger Horie, Edward Huber, Paul Kinnaly, Jr., David Letterer, Nick Lombardi, Fred McCormack, Alan Michalek, Lonnie Nine, K. Noffsinger, Walter Patton, Ronald Rurdue, David Riley, Dan Samer, Gary Siegel, Dr. James Snow, James Stiles, Ralph Strobel, Paul Swearingen, Robert Williams.

Tidbits.....

Leading off this month is a note from former member Paul Mount: "For the FM DXers, a trop/skip alert network list is being compiled. If you would like to be on this list, please send your name, #, and times you can receive calls for tips as they happen on exceptional FM/TV reception conditions this spring and summer. Send all information, updates to- Paul Mount, 471 Emerson Ave., Teaneck, NJ 07666." Paul has a similar net set up for BCE DXers.

Next up, a few words from Peter Hunn, owner of WHRC, Port Henry, NY: "Just a brief note to let your members know that station WHRC-FM should begin operation some time this May. Although WHRC-FM was originally granted a construction permit which specified operation on channel 292A, 106.3 MHz, an FCC rulemaking (involving FM assignments in Vergennes VT, Waterbury VT, and Stowe VT) caused our frequency to be shifted down to 92.1 MHz. Perhaps one interesting feature of our FM operation is that of the studio/transmitter building. Besides serving as WHRC-FM's broadcast facility, the 20'x24' structure also functions as my residence. WHRC-FM will broadcast from a 100' tower (actually located a mile SW of Port Henry in Moriah NY) with a two bay FM antenna. The 1.5 kW McMartin transmitter will be operated at ~ 1,000 watts. Considering transmission line loss and antenna gain (~ .95), the WHRC-FM ERP shall be some 800 watts. Antenna height computes to a rather deceptive minus 77 feet above average terrain. (This is due to the high Adirondack peaks to our west) However, the WHRC-FM center of radiation is 710 feet above sea level. The WHRC-FM broadcast day is 5:55AM-10PM. I will handle the morning MOR/personality program. Plans call for easy listening music from 10AM-6PM, with variety programming during the evening hours. As the warm weather FM DX season draws near, I invite you to tune to 92.1 MHz in order to see if you can receive my little station. Taking the power/height ratio into effect, WHRC-FM translates into one of the smallest commercial FM's in the country. We would represent quite a DX catch! Please be advised that anyone who sends in a correct WHRC-FM reception report, along with a self-addressed stamped envelope, will most certainly receive a letter of verification."

As noted elsewhere, I've resigned the positions I hold in WTFDA effective July 31, 1982. I'll be happy to help my replacement get oriented to the job, but I'll carry on in the positions no later than the stated date. Ideally, the circulation manager should also do the Mailbox column, as he would have immediate access to the membership records vital to the column. Also, it would not hurt if the member who takes it over is located close to the Chicago area to be in easy reach of the other board members. This, however, is not a necessity. I'll try to be in Staten Island to help orient my successor. My last Mailbox will be in the August issue. Till then, keep those cards and letters coming.....73.....jz

FCC FM NEWS

Bruce F. Elving, P.E., Editor
Box 24
Adolph MN 55701, U.S.A.

New FM Stations Authorized:

CA Solvang 96.7 3000 h.v.; 50' [Radio
MN Rochester *90.7 2800 115' MN Public/
NH Nashua 106.3 3000 h.v.; 165' k-replaces
WOTW-FM, deleted by the FCC
NJ Ocean City 98.3 3000 h.v.; 290'
NY Buffalo *91.3 100 watts 110' SUNY
NY Ticonderoga 103.9 1540 h.v.; 380'
SC Greenville *89.3 41000 h.v.; 1100', g, g,
Evangel Christian School
TX Edinburg *88.5 3000 h.v.; 280', g, Spanish,
Rio Grande Bible Institute
TX Laredo 98.1 96000 h.v.; 810' (replaces
KFIX, which should be listed on 92.7)
VT Randolph 102.3 3000 h.v.; 300'

Slogans, NonIDs

AL Eufrata WKQK 92.7 K-93, k[country] (strict)
DC Washington WGAY-FM 99.5 Stereo-99 (not)
GA Manchester WQCK 93.3 QC-93, no longer
utilizing dual ID with Columbus; only
Manchester mentioned on the hour!
IN Frankfort-Kokomo WSHW 99.7 Shine-99,
now on with 50000 h.v.; 460', Stereo
MD Hagerstown WWCs 106.9 Country-Sunshine
NM Clovis KICA-FM 107.5 k, "Kicker-Country"
NY Brookport WBSU *88.9 89-BSU (now on
with 130 h.v.; 150' g)
OK Anadarko KRPT-FM 103.7 K-104

K-104 FM

ANADARKO, OK

Correct FM ATLAS spellings

PA Allentown WKXW 104.1 Kicks-104
PA Harrisburg WFSM 99.3 Sunny-99 (not strict)
PA Philadelphia WMGK 102.9 Magic-103
VA Manassas WEZR 106.7 EZ-Radio (not strict)
PA Petersburg WPLZ 99.3 Magic-99 K (ABC
Rock Network)
VA Richmond WTVR-FM 98.1 FM-98
ON Ottawa CHEZ 106.1 Shay-106

Stereo (\$)

CO Durango KIQX 101.3 r, D (ABC Direction)
IL Evanston-Chicago WJOJ 105.1, no E
NM Clovis KICA-FM 107.5
PA Butler WLER 97.7, now m
SD Brookings KGKG 94.3, rock
TX Lubbock KRUX 102.5 k

SCA (+67 kHz)

IN Alexandria WAXT 96.7 no SCA
MA Boston WEEI-FM 103.3 m (carries WPST
97.5 Trenton NJ off satellite-temporary, to be
Dow Jones)
NJ Trenton WPST 97.5 Greek (SCA on bird, too?)
NY Rochester WHFM 98.9 no SCA
NC Statesville WFMX 105.7 talking book
NC Winston Salem WKZL 107.5 music [Jones II
PA Philadelphia WCAU-FM 98.1 to leave Dow/
TN Nashville WISX-FM 97.9 no SCA-replaced
by WZEZ 92.9 with iuzak.

Call Letters

AL Reform 101.7 WVRT KS El Dorado 99.3
AR Fayetteville 107.9 KEZA KSPG (KOYY-FM)
AZ Green Valley 92.1 KEZG LA Boyce 98.3
CA Marina 92.7 KBQQ KBCE (KFQI)
CA San Francisco 103.7 KGO-FM (KSFZ), goes all
news and talk, including ABC Talkers, no coe net,
remove \$ designation as will not carry true stereo,
even if \$ generator remains on: ABC Direction net.
ID Lewiston *97.7 KJLC IL Metropolis 98.3
ID Nampa 96.9 KBNY (KUUZ) WRIK

MD Bethesda 94.7 WLTT (WJMO), still "W-
Light," soft rock
MI Big Rapids 102.3 WAAQ [m
MI Muskegon Heights *91.7 WABM (WKJR-FM),
MN Minneapolis 93.7 WAYL-FM (WAYL-FM)
NE North Platte 103.5 KXNP
NJ Cherry Hill *89.5 WEHS
NJ Long Branch 107.1 WMJY (WUUU)
NC Beaufort 103.3 WZYC VA Yorktown 94.1
OK Elk City 96.5 KECO WKEZ-FM (WVYA)
OR Creswell 95.3 KRNN
OR Sweet Home 107.1 KNTL
PA Sharpville 95.9 WMGZ (WGBZ)
TN Sodus-Daisy 102.3 WCHU-FM (WXXC)
TX El Paso 93.1 KAMZ (KAMA-FM)
TX Memphis 105.3 KLSR-FM \$ k
BC Vancouver *101.9 CTR rock ON AIR, 19 w!

Formats/Networks

AL Phenix City WEIZ 100.1 rm [P
AK Petersburg KFSK *100.9 P, Sitka KCAW *104.7
AK Wrangell KSTK *101.7 P
CA San Diego KEZL 102.9 D (ABC Direction)
CA Seaside KMBY 107.1 D (was Y)
CO Denver KPXE 95.7 rock, no U
CT Stamford WYRS 96.7 D (still not stereo?)
DC Washington WKYS 93.9 rs, no "Disco-93," now
back to "93-KYS," WASH 97.1 rm
FL Green Cove Springs WKUE 92.7 soul
GA Atlanta WVEE 103.3 sr (more soul than rock)
GA Cumming WVVVE *91.5 g (stereo?)
GA Perry WPGA-FM 100.9 soul
IL Chicago WUSN 99.5 D (ABC Direction)
IN Terre Haute WTHI-FM 99.8 k, "HI-99"
IA Sioux Center KVDB-FM 94.3 m
KS Ottawa KKKX 95.7 A (not E)
MD Arnold WACC *89.9 p; Worton WKHS *90.5 r
MI Grand Rapids WLAV 96.9 TK (still has The Source)

WHUH! STEREO 98fm
312 MONTEZUMA AVE., HOUGHTON, MICHIGAN 49931

MI Houghton WHUH 97.7 D (was Y), DXer Paul Petosky named WHUH manager!
MI Muskegon Heights WABM 101.7 m
MN Mexico KWWR 95.7 U (still FM on SCA)
MT Missoula KYSS-FM 94.9 k[country]
NE Crete KTAP 103.9 U (UPI Audio)
NV Reno KUNR *88.7 P (National Public Radio)
NM Clovis KCLV 99.1 (k), no nonID
NM Clovis KCLV 99.1 (k), no nonID
NY Auburn WPCX 106.9 k
NY Bristol Center WYLF 95.1 m, \$, full ID on the hour
and half hour. QSL to 1552 Rochester Rd., Camendaigne
NY 14424
NY Oneonta WIEZ 103.1 T (The Source)
NC Durham WDBS 107.1 cj OH Eaton WJAI
NC Elizabeth City WMYK 93.7 rp 92.9 D (was U)
NC Farmville WRQR 94.3 rm OH Kettering
NC Greenville WZMB *91.3 p WVUD 99.9 r
NC Waynesville WQNS 104.9 k (not nr), CBS'
NC Williamson WSEC 103.7 rk RadioRadio
NC Winston-Salem WSEZ 93.1 r, m
PA Lancaster WFNW *89.1 progressive rock
PA Mechanicsburg WQVE 93.5 QV-93 T ("an awful
station in my back yard. Very low ratings, too")
PA Middletown WMSS *91.1 rs PA Reading WXAC
PA Millersville WIXD *91.7 pj *91.3-rock
PA Pittsburgh WDUQ *90.5 pc, WYEP *91.3 pj
WA MO 105.9 rs, "Wham-O"
TN Memphis KWAM-FM 101.1 soul. [call letters.
TX Big Spring KFNE 95.3 rock, "K-95" used with /
TN Sevierville WMYU 102.1 S (AP Audio)
VA Berryville WYOO 105.5 NBC
VA Farmville WUTA *90.1 r, mono, on "odd times, eve-
nings usually, 20% modulation"

WV Fairmont WFGH 97.9 ABC-Direction
WY Jackson MNTN 96.9 mk (some rock)
"Signal heard well into Yellowstone Park."
ON Ottawa CKCU 93.1 pj; not pc (no
classical on '93 point 1")
CKBY 105.3 all k, no classical

Facilities' Changes

AL Ashland WASZ 95.3 1000 h.v. 540'
AL Atmore WSKR 104.1 100000h.v. 1600'
AL Greenville WKXN 95.3 300' (3000 h.v.)
AZ Bullhead City KRHS-FM 102.7 (from
202.3) 100000 (600')
CA Los Angeles KIQD 100.3 5100 h.v. 3060'
CA Oakhurst KAAT 107.1 110 h.v.; 1070'
CA Pacific Grove KAZU *90.3 4200h.v. 4900'
CO Colorado Springs KKCS-FM 101.9 79000
h.v.; 2180'
FL Orlando WJWJ 105.1 1310' (100000 h.v.)
GA Augusta W980-FM 104.3 100000h.v. 1000'
GA St. Mary's (not St. Mary's-Kingland)
93.5 290' (3000 h.v.)
ID Rexburg KRIC *90.1 210 80'
IN Charleston WUSO *89.7 (from 89.1)
240 h.v.; 150'
MI Portage 107.7 480' (50000 h.v.)
MN Anoka KTNW-FM 107.9 430' (100000h.v.)
MS Vicksburg WQMV 98.1 100000 h.v. 800'
NJ Piscataway WVPW *90.3 200 (h); 8', but
no power increase yet for shreentimer WVPW
Highland Park NJ. WVPW now on with 200 w.
WVPW's music format is rock.
NY Brookport WBSU *88.9 130 h.v.; 150'
NY Hampton Bays WWHB 107.1 280' (3000h.v.)
NY New York WRFM 105.1 7800 h.v. 5500v;
1220'
OH Columbus WVKO-FM 94.7 16000 h.v.; 790'
OH Mansfield WVMC *90.7 4800 h.v. 235'

OR Portland KRRC from 89.3 to *107.5
8 watts, minus 50 feet
PA Williamsport WRIC *91.7 770 h.v.; 320'
SC Cayce WZLZ-FM 96.7 1900 h.v.; 340'
SC Columbia WUSC *90.5 (from 91.9)
3000 h.v.; 230'
TN Cleveland WQLS (apparently not
changing calls from WLCV) 100.7
100000 h.v.; 830'
TN Franklin WIZO-FM 100.1 800 h.v.; 600'
TX Dallas KVIL-FM 103.7 1640' (100000h.v.)
TX Laredo KFIX 92.7 (not 98.1) 200' (3000h.v.)
UT Centerville KCSL 105.5 200 h.v.; 960'
WA Spokane KMBI-FM 107.9 2380' (56000h.v.)
CBS RadioRadio (Coded "O")
NY Rensselaer WQBK 103.9 (was A)
VT Barre WRKO 107.1
NY Buffalo WPHD 103.3 (was Y)
LA Baton Rouge WAFB 98.1 (was Y)
VT Burlington WQCR 98.9
OH Cleveland WWMW 105.7
KS Colby KXXX-FM 100.3
OH Columbus WXGT 92.3
TN Cookeville WHUB-FM 98.3
OR Coquille KSHR-FM 102.3, rock
TX Dallas KAFB 92.5
IL Rock Island WJZF-FM 98.9 (was CBS)
MI Detroit WZCY 95.5
KS Dodge City KDCK 95.5
PA Easton WLEV 96.1
WA Ephrata WTRM 95.9, rock

FCC-FM

CBS RadioRadio affiliates (Coded "O") Continued. MI Escanaba WFNW 104.7 (was AP Audio), MA Fitchburg WIMP 104.5 (was Mutual), FL Gainesville WRUF-FM 103.7 (was CBS), apparently now rock; MT Great Falls KLFM 92.9, NC Greensboro WDMG 97.1 (was U) Anderson SC WANS-FM 107.3 (was The Source); CT Waterbury WIOF 104.1 (was ABC-E), NC Keene WNBK 103.7 (was CBS), FL Lake City WNFQ 94.3 (was CBS), WY Laramie KIOZ 102.9 (was CBS), NV Las Vegas WKDQ 93.1 (was RKO), KY Louisville WKJF-FM 99.7, VA Hampton WJDE-FM 101.3 (was ABC-FM), MO Osage Beach KYLC 93.5, MA Pittsfield WKQT 107.7, RI Providence WBRU 95.5 (was "The Source"), WA Pullman KQOD 104.9, apparently rock; NV Reno KRND 105.9, NH Rochester WWHN-FM 96.7, FL St. Augustine WFOY-FM 97.7, apparently rock. CA Riverside KGRV 99.1 (still gospel?), CA San Diego KJVI 98.1, PA Scranton WGBI-FM 101.3 (was CBS), FL Sarasota-St. Petersburg WWSR 102.5, "102.5" (was Mutual), VA Treaswell WTTZ-FM (was UPI Audio), WI Two Rivers WQTC 102.3 (was ABC Direction net), abbreviated "102.3" (was Mutual), HI HCP 96.3, OH Belleaire WOMP-FM 100.5 (was T, or NBC's "The Source"), KS Topeka KKRD 107.3 (was NBC), WI Wisconsin Rapids WWRW 103.3.

Greg Monti set word that NPR is experimenting with a 92 kHz SCA on the SCAs of WETA-FM *90.9 Washington DC. "92 kHz was picked because it produced little or no 'bible' interference in stereo receivers, and even when modulated, won't exceed a 99 kHz total bandwidth. There have been several announcements in the paper about WDCU 90.1 signing on the air in April. Never happened, although I did once in late March hear vocal jazz being played on that frequency for a very short period of time with no ID." Andy Smith suggests eliminating the term "d" for disco in the future. He says "s" should be sufficient to refer to black oriented stations (except for jazz), and he proceeded to stamp out the "d" listing for several stations he knew about from Memphis to Atlanta and the DC. If you want to stamp out disco, attack other stations in the FM ATLAS that I show as having "d," and the format will disappear (by our decree).

A mystery station has recently appeared in FCC notices-WRVC *90.1 Georgetown KY, long thought deleted, despite NTIS lists which show it authorized (still). It is supposedly a 10-watt, seeking 89.9, but power not specified. WRVC, W. N. R. is an Indian station.

For you mystery checker-outers: Saul Chernos across the lake in Toronto, says he has yet to hear WRUR *88.5 Rochester NY with 19,000 watts-and he's just 160 km across the lake! He notes on my Atlas, p. 37 in one of the two Detroit descending listings on 97.9 WJLB is shown as WMZK, and WLLZ 98.7 is shown as WBFG. On p. 66 CBBK Kingston is shown as CBEK. "Walter Patton's stuff is pretty accurate. I only contest one thing. Most of the new stuff ain't on the air and won't be for a while. Some never will. 94.3 CBBB Belleville ON was even in your last Atlas and I've never heard 'em." He also includes variant listings of the following, which I assume are "construction permits": CIAO 104.9 Niagara Falls ON, CHXL 103.7 Brockville ON, CBBP 103.9 Peterborough ON, and CBGO-48 Owen Sound ON. A reader in Kenmore NY also kicked about my listing phantom CIAO. Saul asks "What ever happened to your request that the CBC's smaller stations ID?" I just heard from them, saying they are considering my letter along with other FM submissions and it is not necessary for me to go to Ottawa to testify. Saul says most small CBC stations now seem to ID. SD Public Radio now combines KESD-FM 88.3 Brookings and KUSD-FM 89.7 Vermillion, with the only daily separate programs 11 p.m. to midnight: an economy move, but interest in public radio is growing, with public stations expected in such areas as Rapid City and Aberdeen. Pete Taylor asked about my "Bea n." It is an extra-legal device operating (not fulltime) as a translator on 107.0 MHz in Kearney NE. I had the chief of the Grand Island FCC monitoring station in class and told him of my "Bea n." and he is not sure it is illegal at its low power. He promised to send information from part 15 of the FCC rules, which could settle the matter. He was surprised the FCC in Washington did not send to his office my letter reporting the "Bea n." operation to the FCC. What other pirate has tried to turn himself in with no response from the FCC?

Phil Boersma noted in the FM ATLAS, WHOO-FM 96.5 Orlando FL missing from the map of that state. WIKL 94.3 Elgin IL carries the Larry King show overnight as its only Mutual offering, apparently. CFRG-FM *91.9 Kingston ON is trying to raise money to go stereo and 7 days a week. "According to an article in the GWDAX Bulletin, CFRG-FM currently operates weekends only with a mono transmitter that dates back to 1953. The transmitter is so old that if certain parts of it break down, the station will be forced off the air because certain tubes, etc. are no longer manufactured, and are irreplaceable. The station wants to add a student fee to raise the \$110,000 it will need for a new transmitter and stereo generator. CFRG-FM is the student-run station at Queen's University." Phil says WTVR 92.3 Detroit is expected to change calls to WCXI-FM and go country to compete with WWWW, and that WSRX *88.5 Allendale MI will remain on the air student-operated until it becomes WGVG-FM, probably next fall.

Simon Geller is apparently losing WVCA 104.9 Gloucester MA. WVCA is the famed one-man classical, mono FM station that has operated since 1967. A challenging company has won the battle, but legions of Simon's listeners plan to pool their funds for an appeal. I will still list it as "WVCA" until I know for certain it is going off-these things can drag on for years! Another classical station is facing a probable fight to stay in the format, as an ownership change threatens WFMR 96.5 Milwaukee. This would also affect Ron Cuzner's all-night jazz show. Mike Drew wrote quite a perceptive article in the Milwaukee Journal pointing out smaller markets supporting commercial classical stations-Palm Springs CA for one. WUWM *89.7 is gearing up for the audience, playing more daytime classics and nighttime jazz.

Ken Simon says the new WQCS *88.3 Fort Pierce FL is on the air with mainly c, j and NPR. "They put out a crappy signal at my home..."

Saul Chernos says there is an organization of illegal stations, called ACE (Association of Clandestine Enthusiasts), PO Box 452, Moorhead MN 56560. I have written them, but so far no reply. Bob Levy, chief engineer WHRL (FM) #1459 NY, says his son, 10, enjoys the FM ATLAS "even more than me. He takes it wherever we travel and checks off the various stations he hears."

Frank La Belle says "While having a look at the first few pages of the new edition of the FM ATLAS I was flabbergasted when I read about the fact that Canadian FM stations must notify the CRTC people if they want to change formats! Of course, I was fully aware of the CRTC's silly laws pertaining to 'Canadian content,' etc., but I thought that, at least, the stations were free to program whatever type of music they felt like playing!"

Snow and winds had an effect on WABX 99.5 Detroit, where Paul Gaines reported the station off the air 4-3-82. Those are good times for trying FM-DX, when your pesky locals are off the air! See my report in Ralph Strobel's column about what I was able to hear when nearby KROA *95.7 Grand Island NE was off the air for almost 24 hours!

David Nieman says that WITR *89.7 Henrietta NY is awaiting approval to increase to 1000 h and v with stereo. They hope to be on with this power by Sept., with antenna on a 13-story dorm. They said they will appreciate all QSL requests. Dave, maybe you can check to see if WRUR is on the air from Rochester NY, and with 19,000 watts.

CONTRIBUTORS: Phil Boersma, Spring Lake MI; Saul Chernos, Toronto ON; Tom Cornell, Greentown IN; Mike Dukin, Ladysmith WI; Paul L. Gaines, Detroit MI; Mike Friend, Mosely VA; Van Robert Haath, Jamesville NC; Frank La Belle, Verdun PQ; Nick Lombardi, Atlanta GA; Prof. Lawrence D. Longley, Appleton WI; James Lyons, Bound Brook NJ; Rev. Charles T. Manning, Rochester NY; Fred McCormack, Fargo ND; Gregory Monti, Silver Spring MD; David J. Nieman, Akron NY; Jim Pizzi, Lovington NM; Reno Nevarini, Clarksburg WV; Ken Simon, West Palm Beach FL; Andrew P. Smith, Dillsburg PA; Pete Taylor, San Francisco CA; Ron Vaughn, Nashville TN; Larry Weil, Acton MA; B. Passanante, Wilmington DE; a "Robert" or "Robin", Seattle WA, and a correspondent whose name I lost from Wells ME. Also, Paul Petosky, WHUH FM 312 Montezuma Avenue, Houghton MI 49931, James Mc Wain, KRPT-FM, 115 West Broadway, Anadarko OK.

"Your contribution helps keep this column interesting to your fellow DXers." Use the Adolph, Minnesota, address for your reports.

TV NEWS

Bill Fahber
336 Atlantic Street
Bridgeton, NJ, 08302

RETROSPECT SIX: AFTERMATH

The big news following the end of the freeze was the advent of UHF. Almost overnight three new items became available at the appliance stores: First was the UHF antenna. After years of VHF-only antennas, these new antennas looked strange: they were smaller, came in different shapes, and had large flat reflectors behind them.

The second item was the UHF converter, for television sets unable to receive the higher channels. You don't hear about these anymore. The third item was the new "all-channel" television set, an obscure term today because all sets are required to receive UHF. But that rule wasn't adopted until the early sixties.

The first UHF station to go on the air was KPTV, ch. 27 in Portland, Oregon. UHF was so new that Empire Coil Company, the station's owner, couldn't find a place to buy a UHF transmitter, until it ended up buying the KC2XAK transmitter used by RCA in the Bridgeport, Connecticut, experiment discussed earlier.

But the prospect of UHF was already beginning to look dim. By the end of June, 1954, of 87 commercial TV grants which had to be canceled by the FCC, 69 of them were for UHF stations. People were not buying the antennas and converters as much as was hoped for. Instead of the "all-channel" sets, people were buying the cheaper "VHF-only" sets. UHF stations were finding it hard to get network affiliation, thus making it hard to get the more popular television programs. UHF transmitting equipment was also hard to get. And advertisers showed little interest in buying time on UHF stations.

The FCC took several measures to attempt to alleviate this situation. The multiple ownership rules, which limited ownership or interest to five television stations, was modified to permit an additional ownership or interest in up to two more additional UHF stations. Research was done on the prospect of satellite stations, which would be the prototype of today's translators. On June 22, 1955, the FCC relaxed power rules, and changed the maximum allowable effective radiated power (ERP) from 1000 kW to 5000 kW, and lowered the minimum allowable ERP to 100 watts. The FCC joined forces with the television industry and the Senate Interstate and Foreign Commerce Committee's Subcommittee on Communications to study the UHF problem.

But the problem grew worse. By the middle of 1955, only one third of the 325 UHF station grants given out by the FCC were still on the air. Many never completed construction; some went on the air but had to

shut off; others still on were on the verge of shutting off.

The FCC was flooded with petitions to de-intermix VHF and UHF assignments. Some of the petitions requested the removal of VHF in certain communities; others requested changing some noncommercial reservations from UHF channels to VHF channels; others suggested that VHF assignments mixed with UHF assignments be reassigned to other communities. These petitions were all rejected by the FCC on November 10, 1955.

While the UHF problem was one of the FCC's biggest headaches, it was not the only one. There was still the big task of handling the hundreds of applications which had been set aside for over three years. There was also a shortage of examiners to study them. After the new table of assignments was made public, there were protests over it. Many cities felt they weren't getting enough channels. Pittsburgh, Pennsylvania received a channel four assignment because of one such protest.

Then there were the "dropouts," applicants for a vacant channel who had no intentions to really build a television station, but were willing to drop their application if another company, wanting to apply for that channel, would reimburse them and hire them as consultants for huge sums of money.

NEXT MONTH: More on the AFTERMATH. There will be no RETROSPECT during August-October in order to make the column shorter during the period of heavy DX reports. This will also help me work ahead on future topics. I hope to resume in the November column with a series of topics relating to the early years of television DX.

APPLICATIONS FOR NEW TELEVISION STATIONS: ch ERP HAAT CITY/STATE/APPLICANT

61 5000 1957 Houston, TX; K-RAM Corp.
47 6009 473 Madison, WI; Madison Family TV.
16 90 1123 Mayaguez, PR; Ramon R. Nieves
32 65.1 870 Toccoa, GA; Millard V. Oakley
48 256 308 McAllen, TX; Hidalgo Communications Corporation
48 618 267 McAllen, TX; Rio Grande Family Television, Inc.
48 1632 579 McAllen, TX; Tele Imagen
48 4071 1346 McAllen, TX; Valley Broadcast'g, Inc.
18 610 424 Wichita Falls, TX; First City Media, Inc.
47 1709 200 Madison, WI; Center City Bc'g
47 2239 1225 Madison, WI; tvUSA/Madison, Ltd.
27 1191 3720 Tucson, AZ; Roman Catholic Church of the Diocese of Tucson
33 2669 631 Pensacola, FL; Pensacola Telev.
33 1380 339 Pensacola, FL; Telecommunications Partners, Ltd.
34 588 1033 Campbellsville, KY; Green River Broadcasting Company

FCC TV NEWS

14 3000 1490 Ayden, NC; Behrvision of N. C.
14 5000 1478 Greenville, NC; Telecommunications Partners, Ltd.
61 4764 1145 Houston, TX; Pan American Bc'g Co
35 1250 638 Kerryville, TX; Tierra Del Sol
38 1334 1510 Roanoke, VA; Telecommunications Partners, Ltd.
38 1096 920 Roanoke, VA; Roanoke Family Tel.
16 528 104 Mayaguez, PR; Carlos Ortiz
22 90 1091 Mayaguez, PR; Michael L. Carter
14 102 781 Ponce, PR; Ponce & Yauco UHF

CONSTRUCTION PERMITS GRANTED FOR NEW STATIONS

15 2.31 117 Fargo, ND; Fargo Broadcasting Co
APPLICATIONS DISMISSED BY THE FCC
Washington, DC; ch. 14; Focus Broadcasting of Washington, D.C., Inc.; Kent of Washington, Inc.; Television Communications, Inc.

APPLICATIONS TO MODIFY CONSTRUCTION PERMITS

33 845 1919 Springfield, MO; KSPR; TL 0.7 mi north of Fordland
2 100 1930 Houston, TX; KPRC-TV; TL 0.55 mi south of Rte 2234; 1.5 mi east of Missouri City line.
2 100 2000 Santa Fe, NM; New Mexico Media Co
20 2495 1800 Tacoma, WA; Family Broadcasting Co.; TL to Gold Mountain, 6 miles west of Bremerton.

APPLICATIONS TO CHANGE EXISTING FACILITIES

14 1412 4188 Albuquerque, NM; KGSN
3 100 1873 Charlotte, NC; WBTV; TL to Bob Friday Road, Dallas.
31 5000 1490 Sacramento, CA; KRBR-TV; TL 1.8 mi ENE of Vorden; 0.29 mi north of Twin Cities Road.

CHANGE IN EXISTING FACILITIES GRANTED BY FCC

31 2400 1020 Sacramento, CA; KRBR-TV
20 2301 1201 Waterbury, CT; WTXN; beg. 4/18
12 316 n.c. Walker, MN; KNMT
4 100 1995 Columbus, MS; WCBI-TV
26 5000 1950 Houston, TX; KRIV-TV
10 114 1582 Charlotte Amalie, VI; WBNE-TV
7 55.6 1688 Chicago, IL; WLS-TV
51 126 n.c. Newark, OH; WSFJ
67 1820 440 Smithtown, NY; WSNL-TV

CALL LETTERS APPLIED FOR: NEW STATIONS

ch C.L. City/State/Applicant
27 KREN-TV Reno, NV; High Country Broadcast'g
51 KLNG-TV Longview, TX; KLMB-TV
42 KLPH-TV Paris, TX; KLMB-TV
51 WBSP Ocala, FL; Big Sun Television, Inc.
26 KMBH El Paso, TX; Paso Del Norte
6 KIDY San Angelo, TX; Sage Broadcasting

CALL LETTERS APPLIED FOR: CHANGE EXISTING

6 WCPX-TV Orlando, FL; WBOO-TV
43 WMOD Melbourne, FL; WKNA

CALL LETTERS ASSIGNED: NEW STATIONS

45 WUSV Schenectady, NY; Union Street Vid.
28 WTGS Hardeeville, SC; Business & Minority Coalition Broadcasters, Inc.
2 KOHA-TV Hilo, HI; Oceanic Broadcasting Co.
40 WTWC Tallahassee, FL; Holt-Robinson Tel.

CALL LETTERS ASSIGNED: CHANGE EXISTING

56 KDOC-TV Anaheim, CA; KGOB

CONSOLIDATED HEARINGS

• Los Angeles, Calif.; ch. 63 (noncommercial assignment); Creation House Research Institute of Science and Technology, Inc.; Jewish Television Network, Inc.; Black Television Workshop of Los Angeles, Inc.; Corporation on Disabilities and Telecommunications, Inc.
• Hammond, Indiana; ch. 62; Apogee, Inc.; Hammond Indiana TV, Inc.; Jovon Minority Broadcasting Corp. (proposes STV); Northwest Indiana Television, Inc.; Hammond Telecasters, Inc.; Pan American Broadcasting Co.; Cafricam Television, Inc.; Cross Country Network, Inc. Except for Apogee, all others propose TL within 250 miles of the Canadian border with an ERP of more than 1000 kW, which, according to a treaty with Canada, requires Canadian consent.
• Rawlins, Wyoming; channel 11; Rawlins Broadcasting Corp.; Strang Telecasting, Inc.

NEW STATIONS ON THE AIR

• WDMA-TV, ch. 17; Grand Rapids, MI; began 3/18/82; 1300kW ERP; 1057' HAAT; TL at Davis Road, 1 mile east of Cherry Valley Road. Address: TV-17, Unlimited; 3117 Plaza Drive NE; Grand Rapids, MI, 49505.
• WOAC, ch. 67; Canton, Ohio; began 3/1/82; 138 kW ERP; 290' HAAT; TL at 4859 Fulton Drive; Address: 4867 Fulton Road NW, Canton, OH, 44718.
• WTTQ, ch. 21, Homewood-Birmingham, Alabama, began 4/21/82; 21.4 kW ERP; 670' HAAT; TL at tip of Red Mountain, Birmingham. Address: Chapman Radio & TV Corp., 2021 Golden Crest Drive, Birmingham, AL, 35209.
• WPWR-TV; channel 60; Aurora, IL; 2100 kW ERP; 727' HAAT; began 4/20/82; TL 0.53 mile northeast of the intersection of Gary and Fullerton Roads, Carol Stream. Address: Metrowest Corp., 233 S. Wacker Drive, Chicago, IL, 60606.
• WBBS-TV, ch. 60, West Chicago, Illinois; began 4/2/82. (Apparently the same facilities as WPWR-TV. Are they sharing time?) Address: HATCO-60, 233 S. Wacker Drive, Chicago, IL; 60606.

STATIONS TEMPORARILY OFF THE AIR

• WAFF, ch. 48, Huntsville, AL until 6/29/82 because of a fire.
• WTKK, ch. 66, Manassas, VA until 5/12/82, to modify facilities.

HAWAII CHANNEL 17: ch. 17 has been allocated to fixed service for use by common carrier control and repeater stations for point-to-point inter-island communications only. There had been no television assignments on this channel in Hawaii previously. No translators or low power stations will be allowed to operate on this channel, either.

CHANGES IN THE TABLE OF ASSIGNMENTS

• Lawrence, KS; add 382 (applied for by Telegraphics, Inc.; opposed by Mid-America Broadcasting of Topeka, permittee for ch. 49 in Topeka, and which will cover Lawrence with their signal, on the grounds that this assignment would not be in the public (i.e., their own) interest.)
• Cape Coral, FL; add 383

Alvin, TN: add 67z (applied for by David Eugene Brown; opposed by Major Broadcasting Company because it would preclude the use of most of the channels from 55 to 69 for low power television and translator use in the area around Houston, Texas. The FCC disregarded this argument because of the secondary status given to translators of the FCC rules.)

● Pittsburg, Kansas: add 11z

CHANGES IN STATION ID APPLIED FOR

● WLBH, ch. 43, Bloomington, Illinois to ID as Bloomington-Norman.

● WTXA, ch. 20, Waterbury, Connecticut (ex-WATR-TV), to ID as Waterbury-Hartford-New Haven.

CHANGES IN STATION ID GRANTED

● KONY, ch. 5, Lander, Wyoming to ID as Lander-Riverton.

CHANGES IN CARRIER FREQUENCY OFFSETS

Apparently the changes in VHF carrier offsets were entirely the result of some of the recent short-spaced drop-in assignments by the FCC. Having gone halfway through the data base list, I found that ch. 16 in Little Rock, Arkansas changed from + to -, but that channel is vacant. One conflicting note is the offset for channel 21 in Birmingham, Alabama, occupied by WTTO: is it - or z offset?

FORUM: Another heavy month in the mail.

Mike Hollis reports WTSG, ch. 31 in Albany, Georgia on about 2/7/82, and WPMI, ch. 15, which IDs as Mobile-Pensacola, on the air 3/11/82. Both are independents. He also replies to Robert Grant's question about WSFA, ch. 12 in Montgomery, Alabama. They are still NBC, not ABC. (Thanks for the photos, Mike! -wbf)

Richard Steinberger sent in a few articles from the Hudson Daily Sun on the television situation in Boston. Two articles give background on the RKO controversy. RKO's parent company, General Tire and Rubber Company, was charged in the early seventies for numerous illegal acts such as bribing foreign officials and illegal political contributions. When RKO failed to inform the FCC about investigations of misconduct, the FCC in turn revoked RKO's licenses for WNAC-TV in Boston, WOR-TV in New York, and KHJ-TV in Los Angeles. RKO, claiming that the failure to notify the FCC was unintentional, fought the FCC in the US Circuit Court of Appeals in Washington, DC. The court upheld the FCC revokal of WNAC-TV, but ordered the FCC to reconsider WOR-TV and KHJ-TV. With channel 7 in Boston open for new applications, New England Television Corporation filed an application, after which the FCC set a deadline for competing applications. Atlantic Television Corporation missed the deadline, and its application was dismissed. New England Television was granted a construction permit. Now Atlantic Television is charging New England Television with failing to disclose certain information in its application (about intentions to sell the station to

Twentieth Century Fox). Elsewhere in Boston WCVB-TV, channel 5, is being sold by Boston Broadcasters, Inc. to the Hearst Corporation, which will exchange it with Metromedia for KMBC-TV in Kansas City, Missouri. The cost for WCVB-TV is 220 million.

Don Purdue dug up a few notes from the 1982 Broadcasting Yearbook about the Minnesota stations coming soon. WMTI in St. Cloud is scheduled to go on next fall with Spanish programming. WFTV-TV, ch. 29 in Minneapolis is scheduled to go on next July.

Bill Graeb reports seeing WJMA, ch. 17 in Grand Rapids, Michigan on 5/18; and KCAQ, ch. 67 in Canton, Ohio, which IDs as Akron-Canton, on 4/2/82. Sharing information from other members in the club, he says that Mike Hollis saw WVCB, ch. 23 in Brownsville, TX, and that Jim Pizzi reported that WEDX and KEMM, both channel 3 in Texas and New Mexico, are both +10 kHz offset. Bill replies, "When I last saw both of these together, they didn't appear to be the same (offset). I must have been getting WISC-3 also (o) as they are in the same general direction and WJMA-3 (+) was also in there mixing things up off the back of the antenna." Jim also reported to Bill that KJAA, ch. 34 in Lubbock, TX, is now on the air.

Andrew Smith sent a few reports and comments. WSBA-TV (future WCPY), ch. 43 in York, Pennsylvania, is pulling the same stunts WHAR pulled: pre-empting CBS programs for local material; Andy wonders if CBS might "WHAR" them also. (Not unless they can get WJAL, ch. 8 in Lancaster, to switch. One member entertained that thought about a year ago. -wbf) Andy says that WSBA would have to leave the Keystone Network. (What is that anyway? I told Morrie Goldman that I never heard of it, and that WHP, WLMH, and WSBA are separately owned, and that their local program schedules are unrelated. -wbf) Other notes from Andy: WHP-21 left the Keystone network last year; WIAH, ch. 56 in Fairfax, Virginia, is to be a satellite of WCVT, ch. 23 in Richmond; Salisbury stations WBOS-TV (CBS) and WMDT (ABC) both have secondary NBC affiliation; WMDT mainly for the NFL games; WMMH, ch. 32 in Washington, DC, is a secondary PBS station (So are the New Jersey Network stations. In fact, that's why NJN changed its name. PBS material is used mainly as fillers. -wbf); WTKK, ch. 66 in Manassas, VA, is on noon until 10-11 p.m. with religious programs, but are still not listed in the TV Guide. (note earlier in this column that WTKK is off for a few weeks while making changes. -wbf)

Leslie Price sent in an article from the 4/4/82 Wilmington Star News about a fairly new type of broadcasting system which I never touched on in this column, and I'm not sure if it has been mentioned at all in the VUE. It's called Multipoint Distribution System (MDS), and transmits scrambled television signals on a microwave frequency. A special antenna is needed to receive the signal, and a converter is needed to watch the program on a vacant VHF channel. Microband Corp. of America got FCC approval to build a microwave

transmitter in Wilmington, North Carolina to broadcast scrambled signals for a radius of 20-30 miles.

Tom Yingling sent two articles. The 4/21/82 Baltimore News American reported that WHJW-TV, ch. 54 in Baltimore, plans to sign on 6/1/82 with Super TV, a pay-TV service which began on WPCQ, ch. 50 in Washington, D.C. The article also mentioned that Baltimore had been served by Limelight, another MDS company offering pay-TV until it suddenly shut off last February without any advance notice. An article in the 4/22/82 Baltimore Sun says that WHAR, ch. 2 in Baltimore, will be on all night weeknights, broadcasting Ted Turner's CNN2 (second Cable News Network). (Krats! so much for meteor scatter on channel 2! -wbf)

Here from Leslie Price: WWAY began construction on its 2000-foot tower and expects to begin use in August. (Where are they going to build the decoy tower? -wbf)

Robert E. Schweitzer sent in an unusual report. While trying to monitor an ATV repeater WA2IUP on 426.25 mhz on 4/2/82, he picked up a pirate television transmitter on about 435 mhz (about seven channel widths below channel 14) transmitting a video-only signal. I won't describe the program content, except to say that it contained some pornographic videotape and R-rated films. (You should see some of the stuff the PBS stations pass off under the guise of culture! -wbf) Every half hour a panel would appear on the screen with "UGLY GEO" and a New York City address. (Sounds to me like the mid-terms were getting to some of the Rutgers University students. -wbf)

Several months ago I mentioned that those newspaper articles with great promises about low power television weren't worth mentioning. But the recent trend in newspaper articles is much more realistic. (For example, the article mentioned last month, which was sent in by Nick Lombardi. Another realistic aspect of LPTV comes in from the 4/4/82 Buffalo Courier Express, sent in from David Nieman. The article expresses the opinions of Al Ancombe, consultant and investor in LPTV and Multipoint Distribution Broadcasting, and Michael Cousins, publisher of the LPTV Reporter, both of whom agree that the cost of building and operating a LPTV station is much higher than what most people figure, and that advertisers are just not interested in buying time on LPTV stations. Leslie Price sent in an article from the 4/21/82 Morning Star, which mentions the possibility of LPTV being another venture of big business, but stresses the chances of local groups and minorities of getting into LPTV. One interesting quote was from Samuel Simon, head of the National Citizens' Committee for Broadcasting, associated with Ralph Nader, "For some of the people who looked at TV the first time and said, 'it'll never make it,' this provides a second chance."

CANADIAN PROPOSAL FOR TELEVISION IN REMOTE AREAS: Proposed Policy and Interim Certification Guidelines for the Use of Broadcasting Spectrum for Local Transmission of Multiple Broadcast Signals. (a review)

The Department of Communications is proposing an idea for covering remote areas with a large choice of stations while still making optimum use of the broadcast spectrum. The proposal describes a form of transmission in which several signals from outside the local area (received by satellite, microwave, relay, or directly) are received at a central point, transmitted from a local antenna, and picked up off-air at home. Such a station would operate within a block of television channels, probably within the UHF spectrum. This block could be as wide as 90 mhz, or 15 consecutive channels. By operating on second-adjacent channels, either all odd-numbered channels or all even-numbered channels, as many as eight separate television signals could be transmitted to a small, remote community. Adjacent communities could build their own system, avoiding interference by either operating on a block of channels not overlapping the first, or, if they do overlap, operate on channels adjacent to the first community. That is, one community would use all odd-numbered channels while a nearby community would use all even-numbered channels.

While there is a possibility of using a block of channels within the VHF spectrum, there are disadvantages: A VHF block could not provide as many channels as a UHF block. Also, a future additional VHF assignment could make a VHF block useless, whereas an added UHF assignment could cause the UHF block to move to another part of the spectrum.

A community could begin a transmitter with a small block, using only a few stations, and add more stations and enlarge the block at a later date. The maximum transmitter power for each channel used would not exceed 100 watts for UHF and 10 watts for VHF. Effective Radiated Power could go up to 1000 watts for UHF and 50 watts for VHF. Because of the maximum powers established, these stations would be given a Priority 2 or Priority 3 level of interference protection (See the April column for discussion on priority level interference protection). These stations would not be permitted to claim protection from interference from a full service station operating on an assigned channel, which would be a priority one station. However, priority 1 stations are to be protected from interference from stations with lower priority.

One thought mentioned in the D.O.C. proposal was the possibility of such a system operating in the FM band relaying FM stations.

That's it for this month. I apologize for the light type. Nobody around here carries the ribbon for my typewriter, and I'm having trouble ordering it. I hope to straighten that problem out by next month.

QSL CORNER

FM-QSLs

Thomas J. Yingling, jr.
221 Pinewood Road
Baltimore, MD 21222

- KS KNZA 103.9 Hiawatha, Box 104, 66434. Send my prepared form with signer of Rod Padley, CE. Eddie
- MD WYST 92.3 Baltimore, 6623 Reisterstown Rd, 21215. Letter from Richard A. Hunt, CE reply in 11 days. Holbrook
- MS WSJC 107.5 Magee, P. O. Box 426, 39111. Letter, signer illegible, CE. Chernos
- NY WCMF 96.5 Rochester, 129 Leighton Ave. 14609. Nice long letter from Michael Bostic, CE. Says am/fm/tv dxing has diminished considerably in the past few years. He used to be a dx'er. Chernos
- WNCQ 97.5 Watertown, Box 63, Gillford Rd. R.D. 2. Letter from Michael F. Ring, & Doreen D. Hanson, Eng. Dept. Chernos
- WNED 94.5 Buffalo, 23 North St, 14202. Letter from Peter Goldsmith. He asked for an contributions!!! Chernos
- OH WAEZ 97.5 Akron, 853 Conley Rd. Send WAKR card with WAEZ ticked off. Signer is illegible, CE. Chernos
- WWST 104.5 Wooster, P. O. Box 384, 44691. Short handwritten letter. "This will serve to certify you report...(Certify; must be a cross between verify & certify, hi!) Signer was Mac, Engineering Chernos
- WCVJ 90.9 Jefferson, Box 112, 44047. Letter & program skeds from Myron J. Hubler, Jr Board of Trustees. Reply in 60 days. Ross
- WHBC 94.1 Canton, P. O. Box 1045, 550 Market Ave. S., 44701. Card from John Schen, CE. Chernos
- WLYT 92.3 Cleveland, 2156 Lee Rd, 44118. Xeroxed form letter, "Congratulations!!!, you're a winner with 92 Rock. We sincerely hope you enjoy your prize & continue listening to 92 Rock" signed by the entire staff. My report also was xeroxed enclosed with letter. The prize was 2 bumper stickers & 1 plain sticker. (AW! & I thought I was going to Cleveland for free.) Chernos
- OK KEBC 94.7 Oklahoma City, P. O. Box 94580, zip 73143. Form letter signed by Joe L. McIntosh, All night Program Dir. also send bumper-stickers, play list in 6 days. George
- TX KVRP 95.5 Haskell, P. O. Box 773, 79521. Letter in 5 days from Tex Harrison, Public Relations Director. Also send 2 bumper-stickers & coverage-map. George
- KORA 98.3 Bryan, 1240 Villa maria Rd. Box 3069, 77801. Memo & business card in 5 days from Roy Gene Munse, PD. George
- KJCS 103.3 Nacogoches, Box 111, 75961. Verification signed on my report form that was unreadable, ce in 5 days. Also send bumper-stickers for stations KJCS-FM & KEEE-AM. George
- KOKE 101.5 Brownwood, Box 280, 76801. Letter in 10 days from Joseph Benson, Operations Director. He used the terms QSL & DX'ers, so the station is aware of the hobby. George
- KIXT 93.5 Greenville, Box 10941, Terrell Rd, 75401. Send a photo copy of my report, signed by Debbie L. Rentham, Office Manager in 5 days. Also send KIXT-FM, KGVL-AM red balloon, business card & rate card. George
- KIPR 95.5 Diboll, Box 336, 75941. Letter in 13 days signed by Tim Johnston, Production Mgr. Also send balloons with KIPR logo on them. George
- WI WJVL 99.9 Janesville, 1 S. Parker Dr., 53545. Send back my prepared form letter form, signed by Clifford Hahn, CE. Eddie
- WJJK 100.7 Eau Claire, P. O. Box 24, 54701. Letter from James W. Casey, CE. Hempel
- WY KFBQ 97.9 Cheyenne, 1806 Capitol Ave, 82001. Letter from Jim Lastraglio, Eng. who says he'll keep my report in "document" status. Reply in 2 weeks. Durkin
- KCWC 88.1 Riverton, Central Wyoming College, 82501. Letter from Jerold A. Garber, Dir. of Broadcasting. Says they also received a report form Fortville, IN (this must have been Dave Hascall?) Reply in 16days. Durkin

Reporters this time around are: Eddie, Holbrook, Chernos, George, Hempel & Durkin. If anybody wants to send in items for use, please send in. I will be awaiting your letters of QSL information, of cards, letters, dial cards, etc. 73's

Tom

SOUTHERN FM DX

JUNE 1982

Danny Buntin
1312 N. Skyline
Stillwater, OK 74074

DEADLINE: 5th

TEXAS HAS SOME LUCK WITH OFF-SEASON SKIP AS PAT DYER RESUMES REPORTING

- Pat Dyer, 5315 Silvertip Dr., San Antonio, TX 78228 - Feb. 1 to May 1, '82 CST
- Equip: Realistic TM-1001 into an Allied 426; 6-el. Archer antenna at 20 ft. with rotator.
- 2/1 Es
- 1800-15 unIDs 88-89
- 1819 XHMT 88.5 Mor Cuernavaca, Sp. 735
- XHMT 88.9 DF Mexico City, Sp. 690
- 1821 XELAt 98.5 DF Mexico City, EL 690
- XHRHt 93.3 Pue Puebla, Sp. 735
- XEJt 93.7 DF Mexico City, Sp. 690
- 1840 XHOROT 94.9 Pue Puebla, Sp. 735
- 1842 XHCYt 90.7 Jal Guadalajara 690
- 1848 XHSO 100.9 DF Mexico City, EL 690
- 1850 XHCTt 95.7 Mor Cuernavaca, Sp. 735
- 1852 XHJEt 94.1 Pue Puebla 735
- 1854 XEDAT 90.5 DF Mexico City 690
- 1858 XEW 96.9 DF Mexico City, "W-FM", rk 735
- 1858 XHAM 92.5 Pue Puebla, ID 735
- 1901 XHNP 89.3 Pue Puebla, town ID 735
- 1943 TG-- 88.1 Guat Guatemala City, ID
- TGRT 88.8 Guat Guatemala City, nx 1120
- 1958 f/outs
- 2/2 Es
- 1821-25 unID 88.9
- 1843 KBYU 88.9 UT Provo, ID 1045
- 1848 KALLt 94.1 UT Salt Lake City, mor 1080
- KWHOT 93.3 UT Salt Lake City 1080
- 3/4 Es
- 1840 t 88.1 Guat Guatemala City 1120
- TGRTt 88.8 Guat Guatemala City 1120
- (t= tentative)
- 3/4 Es, cont.
- 1841 TCHR 98.6 Guat Guatemala City 1120
- (ID, "Radio Mundial", Es then linked with 50 MHz Te into S. America)
- 3/5 Es
- 1008-1015 XETRA 91.1 BCN Tijuana, rk 1100
- 1105 WRAS 88.5 GA Atlanta 880
- WJCTt 89.9 FL Jacksonville, EL 1015
- WRFgt 89.3 GA Atlanta, jazz 880
- 1120 f/outs
- 4/21 Es
- 2220 XHMMPT 92.3 BCN Mexicali, Sp. 1010
- 2223 KJJJ 92.3 AZ Glendale, k, ID 840
- 2224 KXKQt 94.1 AZ Sanford, k 695
- KQYNt 95.7 CA Twentynine Palms, rk 1065
- 2225 KBBCT 98.7 AZ Phoenix, rk 835
- KUPDt 97.9 AZ Tempe, rk 825
- 2228 KMEQ 96.9 AZ Phoenix, EL, ID 835
- KDKBt 93.3 AZ Mesa, rk 820
- KOPAt 100.7 AZ Scottsdale, rk 835
- KHEPT 101.5 AZ Phoenix, c 835
- 2236 XETRA 91.1 BCN Tijuana 1100
- 4/27 Es
- 0848 KPKYt 94.9 ID Pocatello 1195
- 0849 KBLI 97.7 ID Blackfoot, local ads 1265
- KEZJt 95.7 ID Twin Falls, k 1265
- 0851 KUSUT 91.5 UT Logan, discu. 1120
- 0900 f/outs

Nice to try to get back on track with the FM reports now. A little rare to have two days of FM MUF Es in March. The Mar. 4 event, unlike Feb. 1, did link into 50-MHz S. America TE modes. 73, Pat WA5LYX

George Rogers, 320 Lafayette Rd., Chickamauga, GA 30707 - Feb. 23 to April 22 EST

- Equip: GE Superadio, model no. 7-2880-B
- 2/23 tr
- 0910 WWCQ 104.1 GA Lagrange, k 110
- 0930 WDEN 105.3 GA Macon, k 130
- 3/3 tr
- 0950 WMST 102.9 MS Jackson, ad 300
- 1415 WKOA 100.3 KY Hopkinsville, aor 140
- 3/13 tr
- 2155 WZLO 98.5 MS Tupelo, nx 170
- 2157 WKLD 97.7 AL Oneonta, k 80
- 3/26 tr
- 0805 WESE 95.9 MS Baldwin, wx 170
- 1030 WLOS 99.9 NC Asheville, nx 160
- 3/31 tr
- 0927 WMC 99.7 TN Memphis, nx 275
- 1030 WVRV 104.5 TN Memphis, mr 275
- 4/15 tr
- 0920 WIMA 100.5 AL Anniston, m, rare now 80
- WQLS is 100kw
- 0935 WVOC 102.9 GA Columbus, k 180
- 1130 WSTO 96.1 KY Owensboro, aor 200
- 4/20 tr
- 0935 WROQ 95.1 NC Charlotte, ads 260
- 1035 WFBC 93.7 SC Greenville, aor 170
- 1035 WESC 92.5 SC Greenville, k 170
- 1147 WBFM 98.1 SC Seneca, g 160
- 1155 WKRK 95.7 NC Hickory, r 240
- 4/21 tr
- 1920 KHLS 96.1 AR Blytheville, Card. BB 260
- 2031 WNES 101.9 KY Central City, Reds BB 150
- 4/22 tr
- 1026 WSSX 95.1 SC Charleston, ads 300
- 1055 WOFM 94.9 TN Greenville, ads 130
- Totals going into E-skip season: Chickamauga 667, Overall 1681; Goal 2000.
- SPECIAL REPORT-The case of the phantom translators of Rock Springs. A large tower on U. S. Highway 27 in Rock Springs is the reason for all those doubles of Chattanooga FM station on my radio here. (a translator transmitter site?, DB) Here is the list of those phantom translators of Rock Springs, GA:
- 93.9 WDEF/WMBW very strong, 94.9 WMBX 88.9 str.; 95.1 WDEF 92.3 strong, 95.3 WDOD 96.5/ WTVC audio strong; 95.7 WDYN 95.7 very weak, 98.5 WMBW 88.9 very strong; 98.9 WSKZ 106.5 very weak, 101.3 WSKC 90.5 very weak to strong; 99.5 WDEF-TV ch 12 very strong audio, 102.9 WMBW 88.9/WTVC ch 9 audio very strong; 104.7 WQLS 100.7 very strong. (I'm confused, DB)
- These are the enemies of my drive for 2000 this upcoming Es season.....

NORTHERN FM-DX

June 1982

For FM DXers in Canada, the Northwest-Central states of WA OR ID MT WY ND SD NE MN IA MO and states east of the Mississippi River and north of the Mason-Dixon Line.

Saul Chernos - 79 Ridge Dr. - Toronto, ON M4T-1B6

12/13 tr (Toronto)
0206 WSEA 93.3 NY Jamestown, simulcast w/WJIN-AM
0207 WVOH 100.5 NY Rochester, ID, oldies
0208 WROV 89.9 NY Oswego, ID
0211 CJRX 92.7 ON London, "BX-93"
0214 WHEH 102.9 NY Syracuse, g
0215 WYFM 102.9 PA Sharon, "Y-103," T-40 mx
0216 CKO-2 97.5 ON London, //99.1 CKO-2
0235 unID 88.9 ? ? g?
0236 WBUF 92.9 NY Buffalo, ex-WFKZ
12/24 tr (Burnt River)
2010 CBE 89.9 ON Windsor, //94.1 CBL-FM
12/26 MS
1900 CBAF 92.3 NS Halifax, (19), FF, CBC
12/27 tr
0640 CBOF 102.1 ON Brockville, (7), FF, CBC
1054 WNUZ 103.5 MI Detroit, g
1803 CBO 103.3 ON Ottawa, //94.1 CBL-FM
1046 unID 102.3 ? ? MS or tr?
12/29 MS
0004 unID 100.3 ? ? ID, "WOKI?" wx
12/29 Au
0523 WBCS 102.9 WI Milwaukee, ID
An interesting winter this year. Had three Es openings on TV during my brief stay in Burnt River for first ever winter Es here. I was out when it reached FM on 1/1. Too bad, but then DX would be boring if we all got 100% of it. Some nice MS and Au activity; as usual, the Au flares up often here, and the thing about Au DX is that you get stuff that's darn near impossible by tr or Es. CBAF-19 in NS came in by MS and Au... considering it was new, it was interesting to get it by two modes, within three days! I'm only up to about 30 FM's in Ottawa as I've devoted most DX time to AM and Pirate DXing, (not X-ming, at least for now). Which reminds me... anyone getting the NYC area on Es is advised to check 91.5 for either NINE-FM, KSUN (Pirate Radio Central), or WYFA "Where Your Friends Are," (Long Island Pirate Network). Many of these are in the 40-50 watt range and some may even be more; and 10 watt educational have been logged via Es. Especially try in the 0000-0400 EDT range, but anytime else, too. Will be at "the River" 'round May and hopefully till early September and will report DX "as it happens."

Daniel E. Oetting - 2882 Old Cedar Grove Rd. - Broomall, PA 19008

Equipment: Panasonic RF-2600 and Superadio; Ext. antenna directed to NW, 25 ft. AGL.

3/31 tr
2237 WGNV 91.3 NY Syracuse
4/15 tr
2308 WALK 97.5 NY Patchogue, rm
2312 WYRK 106.5 NY Buffalo, k
4/19 tr
2256 WESP 106.3 MD Cambridge, rp, in good
2332 WNNR 88.1 CT Monroe, c
2352 WKCI 101.3 CT Hamden, r
2358 WGBH 89.7 MA Boston, (275)
4/20 tr
0006 WNYU 89.1 NY New York, p, "89-U," ID, WNYU was the only NYC area station over 3kw, left to get.
0045 WAAF 107.3 MA Worcester, rp
0055 WKXS 107.9 MA Medford, rd, "Kiss-108"

12/29 Au
0526 KOEL 92.3 IA Oelwein, ment. NE IA
0529 WCZY 95.5 MI Detroit, ID
0530 WNUZ 103.5 MI Detroit, g
0532 CBHA 90.5 NS Halifax, EE, CBC, nx
0534 WCML 91.7 MI Alpena, WCML/WCMU ID
0535 CBAF 92.3 NS Halifax, (19), FF, CBC
0601 WIAA 88.3 MI Interlochen, ID, QTH
0604 CBE 89.9 ON Windsor, //94.1 CBL-FM
0610 WNIC 100.3 MI Dearborn, ID, T-40 mx
12/30 tr
0819 WJML 98.9 MI Petoskey, area ads
1837 CHLM 103.5 PQ Lithium-Mines, (1), FF
1951 CBE 89.9 ON Windsor, //94.1 CBL-FM
1954 WRIF 101.1 MI Detroit, ID, pr
12/31 tr
0029 WYFM 102.9 PA Sharon, "Y-103," wx
1000 WREN 92.3 PA Warren, ID, QTH
12/31 MS
1945 WBCS 102.9 WI Milwaukee, QTH
1/1 MS
1000 KQIC 102.5 MN Willmar, "...QIC..."
1/1 tr
1001 WGER 102.5 MI Bay City, ID, QTH, nx
Es openings on TV during my brief stay in Burnt River for first ever winter Es here. I was out when it reached FM on 1/1. Too bad, but then DX would be boring if we all got 100% of it. Some nice MS and Au activity; as usual, the Au flares up often here, and the thing about Au DX is that you get stuff that's darn near impossible by tr or Es. CBAF-19 in NS came in by MS and Au... considering it was new, it was interesting to get it by two modes, within three days! I'm only up to about 30 FM's in Ottawa as I've devoted most DX time to AM and Pirate DXing, (not X-ming, at least for now). Which reminds me... anyone getting the NYC area on Es is advised to check 91.5 for either NINE-FM, KSUN (Pirate Radio Central), or WYFA "Where Your Friends Are," (Long Island Pirate Network). Many of these are in the 40-50 watt range and some may even be more; and 10 watt educational have been logged via Es. Especially try in the 0000-0400 EDT range, but anytime else, too. Will be at "the River" 'round May and hopefully till early September and will report DX "as it happens."

- Continued -

NORTHERN FM DX

Daniel E. Oetting continued:

JUNE 1982

NYC pirate WGUT was on the air during the amazing 4/6 snowstorm on 1630 AM and 91.5 FM. I only received the AM though. It was the most professional sounding pirate I've ever heard. The weather on 4/7 was unbelievable here. 16 degrees with howling winds all day brought the wind chill factor down to -17 degrees F. In April? Will the volcanic ash increase the tropo?

David J. Nieman - 12284 Nice Rd. RR 3 - Akron, NY 14001

*ID on tape; New underlined

3/28 tr
0819 WOMP*100.5 OH Bellaire, Rel. Pro. o/WVOR
1715 WRBS* 95.1 MD Baltimore, g, WMIV off
2245 WMBV* 97.3 NY Millville, r, WNCU off
3/31 tr
0835 WIAN 90.1 IN Indianapolis, c, PSA
0859 WHMQ*100.5 OH Findlay, k, o/WVOR
0906 WMEX*100.9 OH Clyde, r
4/1 tr & MS
1038 WWOH*100.9 NY Albany, r
1356 KOXI*101.1 NE Columbus, "FM-101"
4/5 Au
0011 CBHA* 90.5 NS Halifax, c, s/off
715 1000 WAUS 90.7 MI Berrien Springs, g 400
The Best of DX, Dave

4/6 tr
1004 WNUH* 91.7 PA Allentown, r
4/10 tr & Au
265 0835 WPNR* 90.7 NY Utica, r
1602 WMBI 90.1 IL Chicago, g
300 1800 WGBH* 89.7 MA Boston, jc
4/11 Au
0052 WZUU 95.7 WI Milwaukee, r
0100 WHLA* 90.3 WI LaCrosse, j
4/14 GW
1022 WEPD* 90.9 NY Alfred, pr
4/17 GW
0106 CBBK* 92.9 ON Kingston, j, s/off, WBUF off
4/21 tr
1000 WAUS 90.7 MI Berrien Springs, g 400

Dr. Bruce Elving - 4515 Avenue "E" - Kearney, NE 68847

KVOD 99.5 Denver logged Dec. 20 with c, SCA music; minor skip opening 12/24 with WDBO-FM 92.3 Orlando FL at 1652 CST; KADX 105.1 Denver with country music, but still with old call letters Jan. 2. Skip Jan. 3, 1700-1800: WEZL 103.5 Charleston SC, WJYW 100.7 Tampa FL, WFAE *90.7 Charlotte NC. Jan. 17 brought KMAJ 107.7 Topeka, with KKO Satellite network news. 1/19 KPPL 107.5 Lakewood CO. 2/11 KCFR *90.1 Denver CO, and aurora March 1 gave an ID of WNUH *89.5 DeKalb, for my first Nebraska Aurora catch, except for KIAE 103.1 Aurora NE! Tropo March 17 from 2200 to 2359: KKUZ 102.5, KSYN 92.5 Joplin MO, KSAS 106.5 Liberty MO, KUDL 98.1 Kansas City KS, KBEQ 104.3 Kansas City MO, KCEZ 94.9 with SCA music Kansas City MO, and KLRF 104.9 Emporia KS signing off. The next morning gave KNDY-FM now stereo 103.1 Marysville KS and country KSFT 105.1 St. Joseph MO. March 30 KUNI *90.9 Cedar Falls IA blasted through nearby KUCV Lincoln. Tropo the night of April 1 gave KOMX 100.3 Pampa and KLSR-FM stereo country music both signing off near midnight (KLSR-FM a new station in Memphis TX on 105.3), and the following day KXXX 105.5 Chickasha OK signing on at 0600 and KAUR *89.1 Sioux Falls SD at 0800 with 380 watts.

I had a field day April 20 and 21 when nearby KROA *95.7 Grand Island NE was off the air to repair damage to its antenna because of a windstorm. During that nearly 24-hour period, my 10-element double stacked Antennacraft array and borrowed MK (by Magnavox) receiver (replacing ailing Fisher 500-TX) did their duty. Reception conditions were just average, but I identified the following: KPKE 95.7 Denver, clearing up the "KHOW-FM" mystery reported in my April VUD column; KPKE with rock music, no nonID and no network; KWWR 95.7 Mexico MO, still "Country-96" and at 610 km my most distant tropo catch on the frequency, but the one most often received; KKOK 95.7 Morris MN with syndicated John Doremus show in the evening; KKKX 95.7 Ottawa KS heard on the hour instead of pesky "96-X" slogan used at all other times. An excellent meteor burst gave me my only ms station counted thus far from Kearney: "Bayou, WBUT, stereo-96" (New Orleans). My Kearney log in two years of listening stands at 390, far short of the 1,000 stations that veteran DXer Dave Janowiak said a good DXer should be able to hear in just one year of DXing!

Ralph Strobel - 2300 E. McGalliard Rd. - Muncie, IN 47303

4/14 tr 0000 WLFC 88.3 OH Findlay, r mono, s/off claims 100w, ex-10w 90
4/28 tr 2105 WYEP 91.5 PA Pittsburgh, jk, very rare, 840w, still on 91.5 300
5/2 tr 0006 WJMN 106.3 OH New Lexington, r, "M-106," SID, o/WKSY, WSYX off 160
Just like last year, April was a rotten month for FM DX. By the time you read this, I hope we are all experiencing plenty of Es. Perhaps I will see some of you characters at the convention this summer. Let's all support Staten Island. 73 Ralph

EASTERN TV-DX

June 1982

Steve Sprachman: 3939 Eve Drive, Seaford, NY 11783 ES

"It seems that the DX season has started much earlier this year. Trop on UHF has been seen since the end of Feb. Each time with more stations at greater distances. Hopefully, this will mean a great DX season."

Connecticut has provided some excitement at the start of this DX season. WATR-20 Waterbury is now WTX-20 and it is no longer NBC. They are now an independent with an improved signal. Did they increase their power? (Yes they did; from 200kw to 238kw, see the March VUD, page 8-wd.)

Other news of some importance--WNYE-25 was off the air for about a month in February and March. It returned on the air March 16. And, we had a major snow storm on April 6th. The snow has melted and the nice weather has returned. And on to my first major report of 1982:

Days with tropes: Feb. 19, 27; March 10, 11, 12, 13, 15, 16, 18, 20, 21, 23, 24, 25, 30; April 2, 10, 12, 14, 15, 16. Highlights:

March 10 trop 2000-2200; 17, 29, 48 Philadelphia; 23, 32, 53, 65 New Jersey; 16, 22, 28, 44 Seranton; 20, 24, 30, 49 Connecticut; WLVT-39, WFTI-54 NY; 19, 25, 38, 56 Mass.

April 15 trop 1800-2000; 23, 40, 52, 65 New Jersey; 17, 29, 48 Philadelphia; 20, 24, 30 Connecticut; WLVT-39, WROC-16, WSEB-36.

April 16 trop 0630-0730; 15, 21, 27, 33, 43, 49 Harrisburg area; 16, 22, 28, 44 Seranton; 17, 29, 48 Philadelphia; 25, 38, 56 Boston; WTX-20, WLVT-39, WDCD-19, WBFF-45.

Well, that's about all for now. My next report will have details about my trip to the Southwestern U.S.A. set for the month of May (less than 2 weeks from now!)"

Mike De Wan: 1737 East Meyers, Hazel Park, MI 48030 ES

March 1982

17 Es 1420 Cuba-3

20 Tr 1400-1500

WREX-13 IL

WKBC-12 OH

WOSU-34 OH

Columbus

April 1982

"It's been a typically slow winter here, saw no skip except for Cuba-3 on 3-17. Conditions have been slowly picking up over the last month, though, with mild trope openings into Cleveland, Cincinnati, Dayton, the northern Lower Peninsula and western Pennsylvania. So, it looks like it's on the way."

I picked up an 1110 Quantum and a 7' dish late in February, but I'm waiting for this midwestern weather to settle down before putting them up."

Equipment now is a 19" Zenith System 3, a 3610 Crossfire and 4257 Quantum (UHF) at 35 ft., twisted by a CD-45."

Michael P. Hollis: 102 Star St., Enterprise, AL CST

December 1981

24 Es 1730 KWGN-2 CO 1250

31 Es 2200 KIII-3 TX 740

Corpus Christi

KPRC-2 TX 590

Tr 2330 KHTV-39 TX "

KRIV-26 TX "

KHOU-11 TX "

2400 KUHT-8 TX "

6 Tr 0630 WLRN-17 FL 530

William J. Draeb
Ellis St. R.R.#2
Kewaunee, WI
54216

Deadline: 1st

January 1982

6 Tr 0630 WLTV-23 FL 530

Whitt-45 FL "

41.25 Crystal

Palace.

8 Es 0918 WFRV-5 WI 950

Green Bay

1630 KTCA-2 MN 1050

1 Tr 0630 WLRN-17 FL 530

Eastern TV-DX

February 1982

1 Es 1750-1830 YSR-2 El.Sal.

7 Tr 0900 KTLT-18 LA 460

Lake Charles

K22AB FL 75

Panama City

WPCQ-36 NC 400

WCCB-18 NC "

WPDE-15 SC "

24 Tr 0515-0730 KTRK-13 TX

KHTV-39 TX 590

0530 KVVU-24 TX 730

KLRU-18 TX "

Austin

KRIV-26 TX 590

0600 KTVV-36 TX 730

KXTX-39 TX 660

Dallas

25 Tr 0500 WPEC-12 FL 470

0525 WTVX-34 FL 420

0530 WLRN-17 FL 530

Mike Hollis; continued---

February 1982

25 Tr 0535 WPTV-5 FL 470

W.Palm Beach

March 1982

2 Tr 0505 KPRC-2 TX 590

KHTV-39 TX "

0526 KTES-3 LA

Shreveport

0534 KHOU-11 TX 590

0545 KRIV-26 TX "

0615 KUHT-8 TX "

0545 KHOU-11 TX "

0700 KRIV-26 TX "

KTVV-36 TX 730

11 Tr 1130 WPMI-15 AL 150

Mobile

13 Tr 0538 KVEO-23 TX 810

Brownsville

0559 WHMC-23 SC 450

Conway

June 1982

March 1982

13 Tr 0559 WKFT-40 NC 490

Fayetteville

0659 WUNJ-39 NC 510

Wilmington

14 Tr 0030 KVEO-23 TX 810

0500 KHTV-39 TX 590

KTRK-13 TX "

0504 KATN-15 LA 390

0557 KHOU-11 TX 590

0609 KLFY-10 LA 390

0700 KWEX-41 TX 780

San Antonio

19 Tr 0512 KLTV-7 TX 570

0518 KTXA-21 TX 660

Fort Worth

0523 WPTV-24 TN 370

0552 KOKH-25 OK 750

Oklahoma City

0600 KXTX-39 TX 660

"As of 19 Mar. station total is 258 for a little over one year DXing from this location. A lot of early morning fog and record warm temperatures produced the trope into Texas and Oklahoma on the 19th. A lot of stations via tropes 300 miles or less not listed due to relogs and appear often. Already have received letters from KXTX-39 and KVEO-23. Chief Engineer at KVEO-23 showed my letter and color photo to all staff and management personnell and they were please that their station was received at 810 miles, especially since they had only been on the air for about six months." (nice catch, wd)

Jeff Wolf: 1131 University Blvd. W. Apt. 701, Silver Spring, MD 20902 EDT-EST

August 1981

8 Es 2030 muf to ch.5

2100 Unidied-3; CBC?

2300 WESH-2 FL

WPBT-2 FL

Cuba-2

9 Tr 0730 WLVT-39 PA

WVIA-44 PA

WPMZ-69 PA

Es 2130 KNOP-2 NE 1234

KDIX-2 ND t

11 Tr 0800 WKFT-45 NC

WGGT-48 NC

1300 Richmond V's

12 Es 0958 Cuba-2

1000 WPBT-2 FL

1300 Cuba-3

13 Tr 0030 Harrisburg,

PA area.

0530 WSNL-67 NY

WVHT-68 NJ

WITN-7 NC

WABC-7 NY

WCTI-12 NC

Es 2015 Cuba-2

15 Tr 0030 WYTV-33 OH 238

0900 WSNL-67 NY 234

18 Tr 2030 WOVK-13 WV t

2200 WSL-10 VA 226

19 Tr 1000 WXII-12 NC

WGGT-48 NC

21 Tr 2350 WUND-2 NC 219

22 Tr 0300 WSOC-9 NC 332

Charlotte

0400 WLTX-19 SC t

0407 WOLO-25 SC 411

0430 WPCQ-36 NC 332

0530 WCCB-18 NC "

0545 WPMY-2 NC

August 1981

22 Tr 0600 WITN-7 NC 257

0615 WSL-10 VA

1200 WSNL-67 NY

1610 WLIW-21 NY t

2220 WERE-28 PA

23 Tr 0715 WBTW-13 SC 358

WPDE-15 SC "

WJPM-33 SC "

24 Tr 1000 same as 23rd

27 Tr 0215 WITN-7 NC

28 Tr 0715 WPDE-15 SC

31 0045 Tr WCTI-12 NC 269

0115 WNCT-9 NC 243

0135 WOR-9 NY 200

September 1981

1 Tr 0715-0930 SC ehs. 13,

15, 23, 33.

2 Tr 2230 WUND-2 NC

3 Es 1015 KJRH-2 OK t

11 Tr 1100 WSVN-47 VA t

14 Tr 0745 WSNL-67 NY

WLIW-21 NY

0815 W61AL DE 80

W64AS DE "

W62AL VA 114

W62AB WV 86

W62AI NY t

0845 WUNJ-39 NC 336

0900 WTV-51 PA

0930 WRLK-35 SC 409

22 Tr 0730 SC ehs.23,33.

1000 WJWJ-16 SC 488

26 Tr 1030 WXII-12 NC

27 Tr 0000 W25AA xiting

WLYH-15.

0200 WNCT-9 NC

0930 WPDE-15 SC

October 1981

1 Tr 0730 NC ehs.11,28,36,

58.

SC ehs.30,33.

5 Tr 0715 WPCQ-36 NC 332

WRLK-35 SC 409

0730-0830

WLTX-19 SC 411

Columbia

WLO-25 SC "

WUNK-25 NC 244

WJPM-33 SC 358

WUNJ-39 NC 336

WNCS-30 SC 369

0930 WBTW-13 SC 349

12 Tr 0915 WUAB-43 OH 293

14 Tr 0100 WPGH-53 PA

WKBN-27 OH 238

0130 WUAB-43 OH

0145 WJHL-11 TN 332

WSLS-10 VA 226

WKPT-19 TN t

0230 WDBJ-7 VA 226

0730 WYTV-33 OH 238

WPCB-40 PA 173

W36AB MD t

0815 WCLQ-61 OH

WOWK-13 WV t

15 Tr 0630 SC ehs.23,27

0640 SC ehs.13,33

0700-0730

WKFT-40 NC

Boston 38,56 371

WSNL-67 NY 234

WNYE-25 NY t

WLIW-21 NY

0800-0910

WCTI-12 NC

WUND-2 NC 219

NJ ehs.50,58 17

Eastern TV-DX

Jeff Wolf; continued---

June 1982

October 1981

15 Tr 0930 WPRI-12 RI t
WEDH-24 CT t
WSEE-36 RI 345
0946 WAWS-30 FL t
(in fair)
WTVB-51 PA
WVIT-30 CT 283
1000 WAWS-30 FL t
(faded out)
1010 WPTF-28 NC 251
1057 WPEL-15 SC
1100 WBTW-13 SC 349
WJWJ-16 SC t
1300 WBTW still in
1330 WUNJ-39 NC
WTVD-11 NC 246
21 Tr 0900 NJ chs. 50,58,68
CT chs. 30,49
2315 W61AN DE
W64AS DE
WTVB-51 PA
22 Tr 0010 WSNL-67 NY
0300 WABC-7 NY 200
WOR-9 NY "
WPIX-11 NY "
WXTV-41 NJ 196
0315 WMAC-7 MA 371
Boston
0337 WKBT-13 NY 200
0615-0830
WVIT-30 CT
Boston chs.25,38,
56,68.
NJ chs.50,58,68.
WLIW-21 NY 218
WSNL-67 NY 234
WSEE-36 RI 345
W35AB PA
WSMW-27 MA t
W75AP
W73AS
W81AL
0840 WEDH-24 CT
Hartford
0850 WEDW-49 CT 249
0900 WPRI-12 RI 356
29 Tr 0640-0800 PA chs.40,53
Cleveland U's 293
WAKR-23 OH 278
30 Tr 1615 WPGH-53 PA 187

March 1982

25 Tr 0200 WOR-9 NY
0223 WABC-7 NY
0625 WERE-28 PA
0700 WLVJ-56 MA 371
W25AA VA

"If WTVD-11 NC, WKBT-40 NC, WGGT-48 NC or WVPT-51 VA is received between 1200 to 1800, it will be reported regardless of signal strength; all other times, only when the signal is strong. WPTF-28 NC reported only when the signal is strong."

George Rogers; 320 Lafayette Road, Chickamauga, GA 30707 EDT

February 1982

23 Tr 0820 WATL-36 GA 113
WTLZ-38 GA 224
WCWB-41 GA 198
0830 WGTW-8 GA 140

March 1982

5 Tr 2240 WJSP-28 GA 200
2340 WHMA-40 AL 125

October 1981

30 Tr 1615 WTVS-56 MI t
1630 WPCB-40 PA
2130 WPGH-53 PA
(over local)
2230 WUAB-43 OH 293
WNEO-45 OH 238
WAKR-23 OH
2300 WCLQ-61 OH
2355 WJNL-19 PA t
31 Tr 0005 WVIZ-25 OH 291
WKHN-27 OH
WYTV-33 OH
0700 Pittsburgh U's 8 Es
22,40,53.
Youngstown U's
Detroit 50,56
0741 WAKR-23 OH 278
0750 Unided-31 over
WFPB-31.
CICO-32 ON 373
WGTB-30 OH 378
Toledo
WPCQ-36 NC 30 Tr
SC chs.13,15.
1030 WNEO-45 OH 238
WDHO-24 OH 377
1215 WQPR-62 MI 393
1230 Cleveland U's
WSLS-10 VA 6 Es
1300 WLTN or WKPT 27 Tr
1400 WJPM-33 SC
1530 WPCB-40, WPGH-53 28
in all day.
1950 WSLS-10 VA
2030 WJHL-11 TN 332
WPXI-11 PA 186
2110 WSVN-47 VA t
WKPT-19 TN 332
Kingsport
WPCQ-36 NC 332
2200 WDRB-41 KY t
Unided-16; PBS 24 Tr
WKPI-22 KY 322
Pikeville
WPTT-22 PA 172
WFMJ-21 OH 234
2310 WMSY-52 VA t

November 1981

1 Tr 0015 WKHN-27 OH

November 1981

1 Tr 0240 WABC-7 NY 200
0800 WSLS-10 VA 226
0900 WJHL-11 TN t
1600 WMSY-52 VA t
W41AB xltng
WMSY-52 ? on
ch.42.
1800 WSLS-10 VA

January 1982

1 Es 2000 KUSD-2 SD t
muf to ch.5
0900 KARD-3 KS 1050
KCKT-2 KS 1100
KYTV-3 MO t
0925 muf to ch.5
KJRH-2 OK 1000
0945 KFDX-3 TX 1183
0950 KTBS-3 LA 983
1030 KATC-3 LA 1000
1053 Cuba-2 & 3
1100 WPHI-2 FL 900
0700 NC chs.25,39
SC chs.13,15,
33.
0930 WLFL-22 NC t

February 1982

6 Es 0745 Unided ch.2.
27 Tr WRLH-35 VA
Richmond
0645 WPGH-53 PA
March 1982
1 Tr 0707 WUNK-25 NC
WLFL-22 NC t
0810 W75AP VA 63
11 Tr 0630 WPTF-28 NC
13 Tr 0730 WUNK-25 NC244
21 Tr 1530 Philly U's
& WRBV-65
24 Tr 2200 W41AC, W60AL
WAAT-40 NJ
2300 W64AS DE
25 Tr 0000 WNJU-47 NY200
WXTV-41 NJ
0117 WVIT-30 CT283
0130 W60AL xltng
CBS.
0145 WCTI-12 NC

April 1982

15 Tr 1830 Norfolk V's, U's
2350 WCTI-12 NC
16 Tr 0145 WSET-13 VA
0620 WERE-28 PA

WTFDA 1982 CONVENTION REGISTRATION FORM

Please complete and mail
as soon as possible and
not later than July 19!

Please include a
SASE for confir-
mation reply.

MAIL Jerry Pulice
TO: 3201 Richmond Road
Staten Island, NY 10306

Please reserve a motel room for me for the following dates:

July____,____,____, August____,____,____. I would be interested in
sharing a room with one or more DXers: () Yes () No. If yes, do you
have a choice of roommate(s)?_____

() Enclosed is \$20 advance registration fee.

() Will pay at convention.

(Registration fee includes banquet, refreshments, convention expenses.)

If you can provide transportation for other DXers in your area, or along
the way (splitting gas expenses), please explain_____

If you need transportation and would be interested in riding with another
DXer in your area or along the way (splitting gas expenses), please
explain_____

What day and time do you plan to arrive?_____

If arriving at Newark International Airport, please give details (time,
flight number, etc.):_____

If you plan to bring any of the following, please check: () DX cassette

() DX reel-to-reel () DX movie_____format () DX slides

() Beta format videocassette () VHS format videocassette

Name_____

Number of persons to
be included in this
reservation_____.

Address_____

City_____State/Province_____Zip/PC_____

I am primarily interested in: () TV, () FM, () PSB

I would be interested in conducting a seminar: () Yes () No. If yes,
explain:_____

I am interested in going on a tour of WOR-TV () Yes () No

April 1982

April 1982

April 1982

15 Es 2303 XEPM-2 CH 1430 16 Es 2140 KJRH-2 OK 716 22 Ms 1105 WSAW-7 WI 876 Wausau

"A lot of surprise TV-DX brought my total to 523. The March 13th Es opening to Cuba was unexpected as well as the ch.7 Ms on April 22nd; and there were two short Es on April 15-16. Speaking of Es, here is last years' "Top Twenty" Es tv stations:

#1 KMID-2 - times in 31	8 XHRIO-2	14	15 KCKT-2	11
2 KWGN-2	29 9 XHBO-4	14	16 WLBZ-2	11
3 CKPR-2	20 10 CBFT-2	13	17 WGBH-2	11
4 KGET-4	19 11 KTWO-2	13	18 KDIX-2	11
5 CKCY-2	16 12 KOA-4	13	19 KUSD-2	11
6 KNOP-2	15 13 KWAB-4	12	20 KAAA-5	11
7 XHRPM-2	15 14 WPBT-2	11		

"My TV-DX goal this season is 555. Remember, in 1982 DX will come thru!"

Marvin Shults; R.R.#1, Toulon, IL 61483 CST

December 1981

March 1982

April 1982

5 Tr 1200 WQOW-18 WI	20 Tr 1015 WLKY-32 KY	1 Tr 0700 KDSD-16 SD
Eau Claire	WDRB-41 KY	Aberdeen
WQOW-19 WI	WKMJ-68 KY	0730 WTCN-11 MN
	WKYT-27 KY	10 GW 1045 WPWR-60 IL
February 1982	WTVQ-36 KY	Aurora-W.Chicago
22 Tr 1859 Detroit U's	WCET-48 OH	(Chicago)
WFUM-28 MI	WETI-64 OH	13 Tr 0859 KOLN-10 NE
1900 WKAR-23 MI	WXIX-19 OH	KUON-12 NE
27 Tr 0859 WCLQ-61 OH	W66-- OH	0929 KYNE-26 NE
WUAB-43 OH	(xltr of WETI)	15 Tr 0745 WNMU-13 MI
0930 WPTA-21 IN	WPBO-42 OH	0759 WLRE-26 WI
WKJG-33 IN	WCPO-9 OH	
WFFT-55 IN	1059 WHAS-11 KY	
	WKRC-12 OH	
March 1982	1100 WRTV-6 IN	
20 Tr 1015 WKPC-15 KY	(over WOC)	

"The best openings this year occurred on April 1 and 13. KDSD Aberdeen had a color wedge t.p. with South Dakota P.B. signed on ch.2,8,8,9,10,

11,13 and 16 at 0714 just prior to A.M. Weather. The new ch.60 in Chicago has shown two different i.d. slides. One has WPWR Aurora listed as call. The other has WBBS West Chicago listed as call."

Harry J. Hayes; 9 Henry St., Wilkes-Barre, PA 18702

"As I write this it is 4/24, the earliest I've ever seen an E skip season begin in this area of the country. This is excepting the great E skip opening of 3/8/1972 which I consider just off season skip. Naturally, at this time of the year my juices are stirred up for the first sign of E skip on channel 2. After DXing VHF-TV E skip for 12 whole seasons I have mostly all that I can expect to get from this area by that mode. I still look forward to the TV E skip season because I still get a kick out of seeing those noisy schreeching signals from a thousand miles away but more practically because I enjoy keeping a record of each season, even if it means recording WPBT-2 a dozen times. With this in mind and because I have no TV DX to report this early in the season I would like to offer a taste of each season in the preceeding 12 years with your permission, Bill. One interesting thing, I find no two seasons alike.

1970-A very good Es summer and unusual in its duration. First E skip noted on Chs. 2 and 3 on the afternoon of 4/24. Last skip of season noted in the morning of 8/24. A generous number of openings to the west and north west. Offseason: The so-called world E skip opening of 11/8 noted here with FM skip to Alabama. Several good openings in Dec. 70 and Jan. 71.

1971-A late starter. The season really didn't get going until the last week in June. After that E skip was exceptional, every day and intense in early July. Somewhat of a lull in late July then exceptional openings in early August through the 16th. Exceptional opening on 7/30 to the south. Offseason: The winter of 71-72 was a warm and somewhat stormy one as I remember. This was my best year for offseason skip. Six skip sessions noted in Dec. 71. Highly unusual opening on 3/8/72.

1972-An early starter and an exceptionally good Es summer. Numerous DXers in the east note June type openings in early May. Early June and early July were particularly hot for me. A few isolated openings noted by me in early August. All in all this season seemed to start with a bang and peter out by mid July. Exceptional dates: 6/2 and 7/1. Offseason: Chs. 2-5 opening on evening of 10/17. Numerous good openings in Dec. 72 and in Jan.73.

1973-An overall good season. First skip noted on 4/26. Things got going at a good pace the third week in May and didn't slow down until the usual mid July null. Some more good openings in late July and early August. No particular dates stand out in my mind, just a lot of good, moderate length openings. Offseason: I can't report, as I was away at school.

1974-The period from mid May through late June full of good openings. The exceptional date was 6/15 with skip starting as early as 7 AM, some say. Band open to FM and beyond all day to just about all areas. I don't have anything noted beyond 6/30 for this year which was undoubtedly due to laziness in keeping up the log. I don't recall that July was all that great, however. Offseason: School again.

1975-An exceptional May with a 2 thru 6 opening on 5/15 also super, super openings on the 27th and 28th which I missed due to my graduation away at school. Season slowed down in June and July but still good. Cuban TV appeared a few times in June also 2Es to Puerto Rico on 2 and 4 on afternoon of 6/17. Exceptional date: 7/20 Started around 1:30 PM amidst severe thunderstorms here w/skip to Bermuda. A full scale opening erupted shortly afterward with intense skip to FL which swung around to MN nonstop by early evening. Not much skip noted in August. Offseason: An opening on 11/9, not much else.

1976-Another good season with super openings. Season seemed to have a fewer no. of openings than previous years but what openings there were were usually exceptional. May was lousy. Things seemed to get going in early June only to die again until June 27th when there was an exceptional opening which repeated itself the next day. Openings extended from FL to TX with an emphasis on FL for the 6/27-28 openings. Early July was also good with skip on 7/4 also. Mid to late July was nothing special. In short, the late June, early July period made the 1976 season what it was. Offseason: The winter of 76-77 was the coldest ever here, much, much worse than 1982's which the weathermen say was so bad here. Exceptional CX to Europe on the BCB but only a few sparse TV skip openings in Jan.77. A poor offseason as far as I noted it.

1977-A good season but not as good as the previous years or as the early harbingers of the season would have us believe. Season opened with first skip noted on 5/5 and a super but short opening on 2 to 6 to New Orleans on 5/7. Also on 5/7 there was skip to Cuba in the early afternoon. The summer of '77 seemed cooler than previous summers. The skip was unusual this year in that many openings took place into the Maritimes from mid-May until mid June. Also most skip was to the west and north west, there wasn't much skip to the south at all. Skip spread pretty evenly throughout the season with the usual null in mid July. No real all day openings this season but more like 1973 with many shorter openings. Good dates: 5/30, 6/6, 7/6, 7/7, 7/31 with potential skip on ch. 7 and 8/3. Offseason: A return of some activity in this period. Three openings in Dec. 77, two to the Maritimes! One opening noted in Jan. 78 on the 13th.

1978-Season started out good in May but became somewhat of a disappointment by June. It should be noted I started a fulltime daytime job this year so I missed the daytime openings. Nonetheless I checked the set just about every day from 4:30 PM on. Like 1977 most openings took place to the west and north west, also like 1977 the summer wasn't overly warm. Exceptional dates: 6/12, 6/20, and 7/22. Offseason: None noted.

1979-A so-so season. May was good raising false hopes again. June OK but nothing to rave about. The summer of '79 was a cold one here for a large part. Temp. didn't get above 50 on 7/5 which was a sunny day too. An intense Maritime opening on 7/5 in evening and a few good openings at the end of July. The usual good early July CX not noted this season. One good opening noted on 8/2. Other good dates: 5/22, 5/30, 6/23. Offseason: The super period of 1/4 thru 1/6 '80 w/super skip to Dallas, Ft. Worth on two separate openings and another to IA and NE.

1980-Another so-so season. May was terrible even though first skip was sighted on 5/4. Things got off the ground the second week of June and died out after the 26th or so. July was bad also with only two openings noted in the log. August shows one opening in the log. Good dates: 5/28, 6/18, 7/17. Offseason: Opening noted 11/16, not much else.

1981-A really poor season from what I saw of it. May was terrible except for the 22nd when a 2 thru FM opening took place. Late May through late June were extremely dry for skip, the worst dry period I've ever seen. Things got going a little bit after 6/25. July was better with three super openings noted on the 4th, 5th and 26th but few if any moderate openings noted, which usually fill July. Two good openings noted on 3rd and 8th of August. The 3rd to the Maritimes. Most openings again seemed to come from the south west to north west. Offseason: A few skip openings in Nov. Dec. '81. Band swung wide open again in the first week of Jan.82 with 2 to 6 openings noted on the 1st and 3rd.

1982-Prediction: I expect a season similar to '78, '79, '80 that is not too good but better than 1981. I base this upon my belief that high sun-spots are no good for E-skip reception. The sunspot count was pretty high in the winter of 1981-'82, thus my prediction. I think by 1983 we should have a season like 1977 and up hill from then on.

I am sorry to note the passing of Mel Wilson. He was the heart and soul of the Es DX study."

William J. Draeb; Ellis St. R.R.#2, Kewaunee, WI. 54216

Here's a summary of the DX seen during the past month: About the only days that were above normal were April 14 & 15. On the 14th I saw WKMU-21, WUSI-16, WVUT-22, Evansville U's, WCTE-22, WDXR-29 & WKSO-29 in addition to the "usual stuff". On the 15th translators from NE Minnesota were in (Grand Portage, Grand Marais, etc.) and on May 1 I saw WPWR-60 (or whatever their call is) testing with a white square on a black background test pattern. I believe it's called a "window pattern". On the 20th of April I noticed a trace of Es on channel 2 from the south at 1725 and again at 1915. More DX next month, 73-wd

STATION BREAK

c/o Bill Thompson
1907 Seneca Street
Buffalo, NY 14210

WTFDA member ads only. 3 line or 30 word limit.

FOR SALE - Jerrold 4283-2 and Zenith 973-351 pre-amps. 14 dB gain VHF, 3 dB FM, 12 dB UHF. 300 ohm. \$30 each shipping paid. Doug Dornbos, P.O. Box 1288, Traverse City, MI 49684.

TO TRADE - NYC member wants to trade TV Guides, old and new, with other members. Rick Prelinger, P.O. Box 368, Canal St. Station, New York, NY 10013.

WANTED - Control unit for CDE CD 44 antenna rotor system. Need the box that is used for either the CD 44, CD 45, HAM IV or CDE Tailtwister. Glenn Jacobs, RD #1, Box 354-A, Moscow, PA 18444 (717) 842-8245.

Your non-commercial ad can appear in the VHF-UHF DIGEST free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK! This feature appears on a space-available basis.

NEXT MONTH in the V.U.D.



IT'S ALMOST TIME FOR WTFDA
CONVENTION 1982.
WE'LL HAVE A FINAL UPDATE ON
THE PROGRAM.
DON'T MISS IT!

IS THE E-SKIP SEASON A GOOD
ONE? FIRST REPORTS SHOW IT
OFF TO A GOOD START.

MORE METEOR SCATTER INSIGHTS
--BE READY FOR THE MID-SUMMER
PERSEIDS SHOWER.

FM SCOREBOARD

1st DIVISION															2nd DIVISION																							
DX	Total	88-	Es	MS	MS	USA	C	M	F	N	X	O	TPU	YB	As	of	DX	Total	88-	Es	MS	Au	USA	C	M	F	N	X	O	TPU	YB	As	of					
er	2059	331	799	103	286	45+	7	5	3	61	70	9/81	rew	491	84	160	1	0	41	4	4	0	49	79	7/81	ja	448	73	18	1	0	27	1	0	29	81	2/82	
ab	1473	130	685	8	7	44+	3	1	0	49	48	11/81	je2	430	64	172	2	5	39+	5	0	0	45	75	1/82	pd	418	86	70	0	0	31+	3	0	35	78	7/81	
be	1355	185	750	3	0	47+	5	9	0	62	74	2/82	do	414	99	123	0	0	28+	2	0	0	31	77	2/82	ks	380	119	301	0	0	31+	2	1	4	39	66	9/81
db	1341	196	751	38	77	474	4	5	0	57	52	1/82	am	306	31	138	0	0	30	4	0	0	34	52	7/81	dh	243	42	1	0	22	3	0	0	25	76	8/81	
fn	1149	171	542	27	46	39+	5	0	2	47	69	5/82	rr	199	39	16	0	0	14	1	0	0	15	76	12/81	bs	191	64	7	0	9	0	0	0	10	77	1/82	
mb	1080	131	576	8	20	37+	3	0	1	42	74	10/81	fw	145	16	3	0	0	7	1	0	0	8	64	10/81	ko	133	22	-	-	7	0	0	0	7	68	11/81	
ps	1065	164	498	112	5	38+	7	0	1	47	71	8/81	wh	126	45	33	0	0	18+	1	0	0	20	79	5/82	pd2	100	11	0	0	5	0	0	0	5	81	7/81	
fm	1039	133	784	25	77	44+	6	4	0	55	65	8/81	wh2	75	15	0	0	0	4	2	0	0	6	82	5/82													
rs	1025	267	114	22	0	33+	3	0	0	37	72	5/82																										
je	941	186	449	2	0	37+	5	0	3	46	68	3/82																										
ts	900	135	269	0	0	39	4	5	0	48	77	1/82																										
ve	724	148	173	1	3	42	5	8	0	55	77	8/81																										
deb	658	141	43	1	0	28	1	0	0	29	78	11/81																										
dn	650	149	120	13	8	35+	5	0	2	43	59	11/81																										
jj	573	113	300	79	0	21	4	2	0	27	57	8/81																										

STATES STATS																										
STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer
AL	53-tm	44-ab	IN	140-rs	128-ab	NE	26-jj	24-ab	SC	31-je	26-db	SD	24-fm	19-jj	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db
AK	8-jj2	-	IA	90-je	65-ab	NV	12-fm	12-db	SD	24-fm	19-jj	TN	93-ja	72-tm	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db
AZ	29-fm	21-je/db	KS	60-db	41-fn	NH	18-rjs	17-jb	TN	93-ja	72-tm	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj
AR	61-ve	44-tm	KY	79-ab	63-rs	NJ	55-jf	53-res	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
CA	214-jj	96-fm	LA	53-rs	42-ve	NM	40-ab	30-jj	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
CO	49-ab	40-tm	ME	29-ab	25-rjs	NY	150-fm	132-js	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
CT	38-mb	32-jf	MD	36-do	35-jf	NC	58-je	53-db	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
DE	11-sw	10-do	MA	76-rjs	63-jh	ND	19-fm	13-ab	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
FL	107-ab	102-db	MI	105-rs	93-rw	OH	172-rs	124-deb	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
GA	48-db	45-je	MN	111-je	80-fm2	OK	74-db	39-fn	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
HA	-	-	MS	64-tm	34-fn	OR	18-fm	14-jj	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
ID	19-db	13-rs	MO	85-ab	73-db	PA	91-fm	90-je/jf	TX	211-rs	148-ab	UT	18-ab	17-rs/db	VT	9-rjs	8-mb/wh2	WA	39-je	37-db	WA	20-fm2	19-jj	WA	26-rs	24-ab
IL	179-ab	143-rw	MT	15-ab	14-je	RI	9-rjs	7-mb/js	DC	13-sw	13-js/do															

CANADA			MEXICO			MEXICO			OTHER FOREIGN		
PROV	#-DXer	#-DXer	STATE	#-DXer	#-DXer	STATE	#-DXer	#-DXer	CTRY	#-DXer	#-DXer
AT	15-jj	13-db	BCN	9-jp	8-fm	TAM	5-ab	2-je	Bermuda	2-fn	2-ab
EC	9-jj	5-fm	CHI	7-ab	4-jj/je	VER	5-tm	-	Cuba	1-ab/jf	1-fn/ks
MB	14-fm	13-ms	COA	6-jp	2-je	YUC	1-ab	1-ja	Guat.	1-ks	-
NB	4-cb	1-tm/ab	DF	13-tm	7-ve	All	others	- none.	P.R.	1-jf	-
NF	9-fn	3-jf	GTO	1-tm	-						
NS	9-cb	8-ab	JAL	9-ve	7-tm						
ON	51-fn	17-wh2	MOR	1-ve	-						
PEI	1-jf	1-cb	NL	11-ab	4-je						
PQ	18-fn	17-wh2	PUE	3-tm	2-ve						
SA	6-fm	4-ab/pd	SON	1-fm	1-db						
									Surely there are other countries that have been heard by you southern DXers!		

NEW FM DISTANCE RECORDS													Old Record Holder-Miles												
MHz	Prop	CL	Location	Miles	DXer	Location	Miles	DXer	Location	Miles	DXer	Location	Miles	DXer	Location	Miles	DXer	Location	Miles	DXer	Location	Miles	DXer	Location	Miles
89.5	Tr	KEMW	Portales NM	965	Jim Ayers	Murfreesboro TN	965	Jim Ayers	Murfreesboro TN	965	Jim Ayers	Murfreesboro TN	965	Jim Ayers	Murfreesboro TN	965	Jim Ayers	Murfreesboro TN	965	Jim Ayers	Murfreesboro TN	965	Jim Ayers	Murfreesboro TN	965
91.5	Es	KHJC	Mexicali BCN	1450	John Ebeling	Hloomington MN	1450	John Ebeling	Hloomington MN	1450	John Ebeling	Hloomington MN	1450	John Ebeling	Hloomington MN	1450	John Ebeling	Hloomington MN	1450	John Ebeling	Hloomington MN	1450	John Ebeling	Hloomington MN	1450
100.7	Tr	KORQ	Abilene TX	800	Jim Ayers	Murfreesboro TN	800	Jim Ayers	Murfreesboro TN	800	Jim Ayers	Murfreesboro TN	800	Jim Ayers	Murfreesboro TN	800	Jim Ayers	Murfreesboro TN	800	Jim Ayers	Murfreesboro TN	800	Jim Ayers	Murfreesboro TN	800

				<u>Key to DXers' Initials</u>											
be-	Bruce Elving	Duluth	MN	ja-	Jim Ayers	Murfreesboro	TN	je-	J. Pella	S. Plainfield	NJ	ps-	Peter Sawatzky	Guelph	ON
ja-	Jim Ayers	Murfreesboro	TN	wh-	W. Hepburn	Niag. Falls	ON	wh-	W. Hepburn	Niag. Falls	ON	res-	R.E. Schweitzer	E. Brun.	NJ
jb-	John Bolduc	Nashua	NH	wh2-	"	Cornwall	ON	rls-	R.L. Sanford	Burnet	TX	rjs-	R. Steinberger	Hudson	MA
ab-	Andy Bolin	Charleston	IL	jj-	J. Jefferson	Pleasanton	CA	ks-	Ken Simon	L. Worth	FL	ms-	M. Sorrensen	Amaranth	MB
cb-	C. Bonnell	Frederickton	NB	j32-	"	Anchorage	AK	rs-	Ralph Strobel	Muncie	IN	sw-	Steve West	PA	
deb-	Dave Brumfield	Muncie	IN	fm-	F. McCormack	Des Lacs	ND	rew-	R.E. Wood	C. Girardeau	MO	rw-	Roger Winsor	Hobart	IN
db-	Danny Buntin	Stillwater	OK	fm2-	"	Fargo	ND	dn-	David Nieman	Akron	NY	am-	A. Michalek	Springfield	MA
mb-	Mike Bugaj	Enfield	CT	tm-	Tim McVey	Bolivar	TN	fw-	Frank Wheeler	Erie	PA				
pd-	Pat Durkin	West Allis	WI	fn-	Fred Nordquist	Clay	NY								
ve-	Vernon Eaton	Benton	AR	dc-	Dan Oetting	Broomall	PA								
je-	John Ebeling	Elmington	MN	jpo-	Jim Pizzi	Orcutt	CA								
je2-	"	"	Prossit	js-	Joe Smith	Johnson City	NY								
ef-	Eric Fader	Bayside	NY	rr-	Robert Ross	London	ON								
dh-	D. Hascall	Fortville	IN	rd2-	Pat Durkin	W. St. Paul	MN								
ko-	K. Onwachuic	Pk Forest	IL												

STAGGER STACKING

by
BILL THOMPSON

Stacking antennas of the same kind can be of great use for improving weak signal DX results, especially with regard to tropo and meteor scatter work. Usually, this technique of combining the outputs of two antennas is used to sharpen their forward receiving patterns, making the antenna nulls extremely "deep," while producing a theoretical 3 dB increase in forward gain (actually closer to 2.5 dB in practice).

Deep antenna nulls are important to a DXer--perhaps more important than antenna gain in many cases. When you are trying to identify a DX signal through a local or semi-local groundwave signal on TV or FM, your chances for success often depend solely on the depth of your antenna's nulls. You have to get rid of the strong signal to pick out the weaker one underneath.

For this purpose, three general types of antenna stacks are popular with VHF DX enthusiasts, all of them for their own special characteristics. There's vertical stacking, with both antennas mounted on the same mast. Then there's the horizontal stack, with side-by-side mounted antennas. Finally, there's a combination of the two previous approaches, the quad stack, with four antennas--to produce the best characteristics of the vertical and horizontal configurations. The quad stack may well be the ultimate DX antenna system for the TV or FM enthusiast.

More elaborate arrays would consist of 8, 16, or more (!) antennas stacked, and are usually only found in CATV work. Actually, going beyond a quad stack array poses so many additional problems (combiner loss and phasing considerations start to get very critical) that it becomes not worthwhile.

A type of horizontal stacking, known as phase-nulling, has been used by some DXers with much success for DXing E-skip literally in the shadow of their local transmitters. Used mainly by TV DXers, but also of great potential to FM DXers, this type of horizontal array requires a fairly good amount of backyard space, or perhaps a large area of flat roof. Phase-nulling takes advantage of the fact that varying the distance between two horizontally stacked antennas can greatly narrow their resultant beamwidth by a considerable ratio. It can transform the deepest part of the antenna's individual nulls from a few dB down to 20 dB or more down--enough to make nothing less than an astonishing difference if done properly. It can even be far more effective than using a vertically mounted antenna for "re-polarized" E-skip DX, a trick popular with some TV DXers for getting some IDs through local signals, which works to varying extents mainly because it reduces local signals by about 20 dB. Without such tricks, a locally occupied channel can be all but useless for DXing E-skip, and you may only be able to have "solid CCI" at best when the antenna is pointed at the DX. With phase nulling, the DX signal can be made to wipe out the local signal under the same conditions! Proper phase nulling often has the effect of making the local or strong semi-local signal appear as if it were suddenly 60 or 70 miles away.

STAGGER STACKING

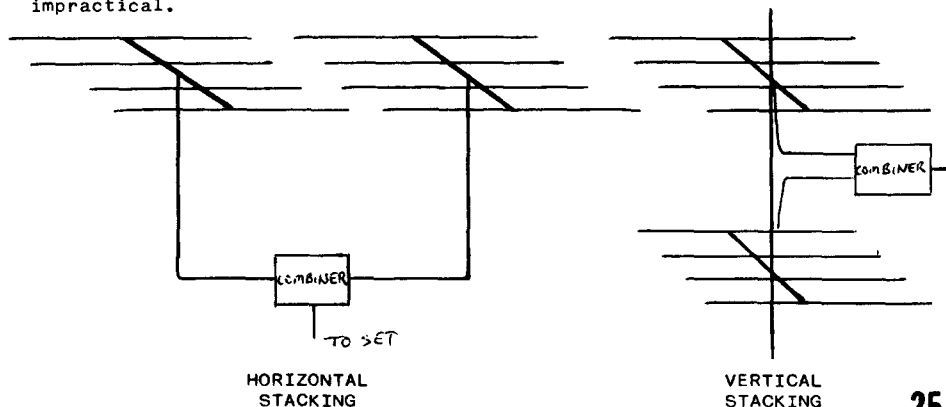
A most useful article on phase-nulling for TV DXing appeared in the VHF-UHF DIGEST in the December 1973 issue (available to members through the Reprint Service). In this column, part of Bob Cooper's classic TEK NOTES series, you can find just about everything you need to know about this ingenious method of reducing unwanted local and semi-local signals to identify DX. Although this method is complicated by the fact that the amount of separation between the two antennas is determined by the angular difference between the direction of the local station and that of the DX, the article includes a table of spacing distances that can be applied in almost any situation.

The real beauty of this method lies in the fact that for E-skip DX, antenna height is not especially critical--so such a stack need only be around ten feet, or slightly less, above ground. In fact, going much higher would probably hurt more than help, because you'd pick up more of the local signal, without a proportional increase in E-skip signal.

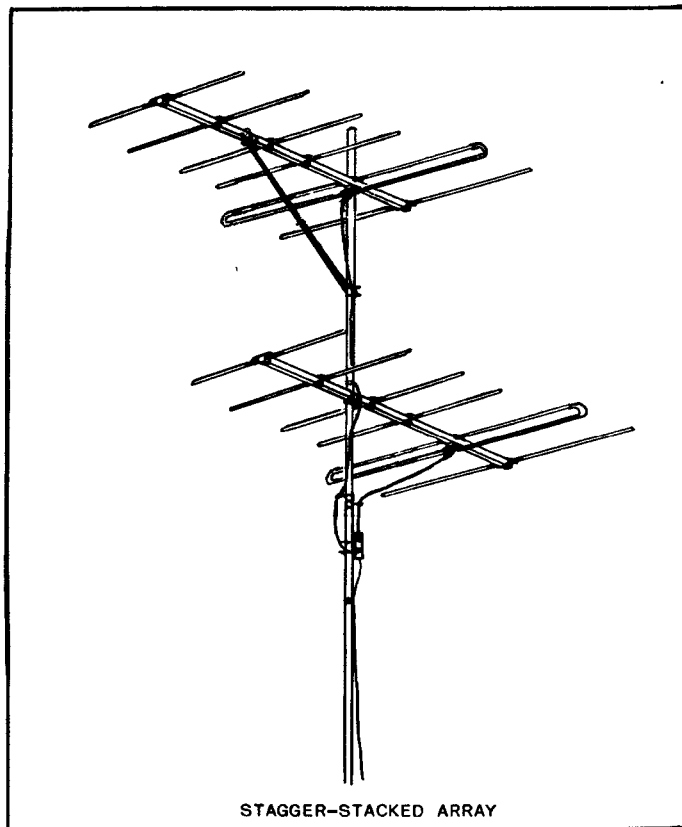
This method works because in addition to the 2.5 dB increase in gain, it more importantly produces a much deeper null pattern than would be possible with just one antenna. No matter how poor the null of an individual antenna is to start with, stacking another identical antenna side-by-side at a proper distance away (and with properly combined outputs) will produce a large improvement in the null. If you start with decent antennas, the improvement is very large. For lowband E-skip on TV, five-element yagis are excellent in this application.

Vertical stacking, on the other hand, is used primarily for the increased gain it brings--because it normally gives you no significant improvement in the depth of antenna nulls. It does bring a great improvement in the vertical plane pattern of the antennas, something that DXers usually do not concern themselves with. After all, it is the nulls in the horizontal plane that are most important to us. That's where all the DX is coming from! Nevertheless, stacking antennas vertically will always reduce signal fading, especially the type of fading usually encountered as "airplane flutter." It also substantially reduces E-skip fades.

But there is also a form of vertical stacking--a special variation of it--that can be used to great advantage to the TV and FM DXer. In cases where the unwanted local signal and the DX station are 180° apart in antenna heading, your chances to identify the DX successfully will normally depend upon the front-to-back ratio of your antenna. For example, a typical low band TV yagi offers about 20 dB of f/b ratio, meaning that the unwanted local signal would be reduced to about a tenth of the strength it would be if received from the front of the antenna. This may sound impressive, but remember, a local station can flood your location with tens of thousands of microvolts of field strength--more than enough to produce snowfree video even within the deepest nulls of the antenna's response pattern. Clearly, when the DX and unwanted local signal are in directly opposite headings, the f/b ratio of a single antenna will not be enough, in many cases, to be of use; and horizontal phase nulling in this case is impractical.



STAGGER STACKING



STAGGER-STACKED ARRAY

So, in situations where the unwanted signal is directly in back of the DX--or, as we said, 180° apart in antenna heading--a technique called stagger stacking is the answer. The illustration above shows what a stagger-stacked array of two FM yagis looks like. As with conventional vertical stacking for gain purposes, proper antenna spacing is very important. And of course, both antennas have to be identical.

But with stagger stacking, one antenna--the top antenna--is staggered in that it is mounted $\frac{1}{4}$ electrical wavelength ahead of the lower one. Phasing of the antennas is also different than it would be in conventional vertical stacks. When stagger stacked, the lengths of coaxial cable used to combine the outputs of the antennas must be carefully measured and cut. The section of coax that runs from the "staggered" top antenna must be made $\frac{1}{4}$ wavelength of the coax with respect to the velocity factor of the particular type of coax cable used. This distance will be different than $\frac{1}{4}$ of an electrical wavelength in free space, the figure you'll be using to space the antenna ahead of the lower one. The velocity factor for foam coax cable is 0.78--meaning that it's 78% of the distance of the free space $\frac{1}{4}$ wavelength figure.

Because the top antenna has to be mounted ahead of the lower one, it will have to be modified slightly. Usually, this will mean drilling two new holes for the "U" bolt. Also, if you're using a long-boomed yagi (such as a high performance ten element type), you may need to improvise a way of supporting the long imbalanced section of antenna boom. Guy wire will work for this, but a diagonal support arm is best, as in the illustration above.

STAGGER STACKING

Stagger stacking works the best only at one frequency. Therefore, this can only be done for one channel at a time. If you have more than one local signal that's directly in back of the direction of the DX, you can either build yourself another array, or make your stagger stack rig "flexible" in such a way that it can be quickly modified for the other channel. For E-skip on lowband TV channels, it's best to keep such an antenna stack fairly close to the ground--remember, going much higher will just tend to increase the unwanted local signal strength, and defeat your purpose.

The antennas you use have to be identical. Lowband yagis should be used if you have more than one lowband channels directly in back of the DX; for just one unwanted local signal, use a cut-to-channel yagi. The better the antennas you use, the better the results you can end up with. Stagger stacking two five-element cut-to-channel antennas with a fair amount of gain and a fairly good f/b ratio will give you about the same amount of gain a single ten element antenna would--but the resulting f/b ratio will be very good; much higher than possible normally. Those who have stagger stacked ten element yagis end up with almost incredible results, sometimes even reporting being able to see the tower lights of the local transmitter on the horizon in one direction, while the DX comes rolling in over the local from the opposite direction.

There's no magical secret to successful antenna phasing to create such deep nulls, although when properly done, you may think so. With horizontal phasing, and with stagger stacking, what you are doing is actually using the local signal to cancel itself out. In the case of stagger stacking, the local signal is arriving at the staggered antenna from the rear just a fraction of a second later than it's getting to the back of the lower antenna. After running through the unequal lengths of cable to the combiner, the signals from the two antennas combine in such a way that they are, electrically speaking, 180° out of phase. When the same signal combines with itself in such a way, it results in a net reduction in strength, rather than addition. In the meantime, signals coming from the other direction, 180° in beam heading away from the local, can only add together as they would in a conventional vertical stack.

In order to construct a stagger stacked antenna array properly, you will need to follow certain guidelines. First of all, make sure the vertical distance between the two antenna booms is at least 0.6 wavelength of the channel or frequency in concern. For best results at lowband, the vertical separation between the antennas should be one wavelength; however, this may not be possible at channel 2 for most DXers, as it would mean that the antennas be 17 feet apart. In this case, you may have to settle for 0.6 wavelength spacing (over 10 feet). Here are some suggested spacings to use for the vertical separations:

Channel	2	3	4	5	6	88.1	99.9	107.9
Vertical Separation (in.)	124	112	103	90	83	80	71	65

This distance can be found by dividing the frequency, in MHz into 11808 (to give you wavelength in inches), and multiplying the result by 0.6 (in other words, you are looking for 60% of the distance of the wavelength for the optimum spacing in inches). The figures given above for the TV channels are optimized for the center of the channels. Purists may argue that what you are most interested in eliminating is the video carrier of the channel in question, so may wish to re-calculate.

You must also find the distance that the staggered antenna "sticks out in front" of the lower antenna, and this can be determined by the formula:

$$\frac{1}{4} \text{ wavelength} = \frac{2952}{\text{freq. (in MHz)}}$$

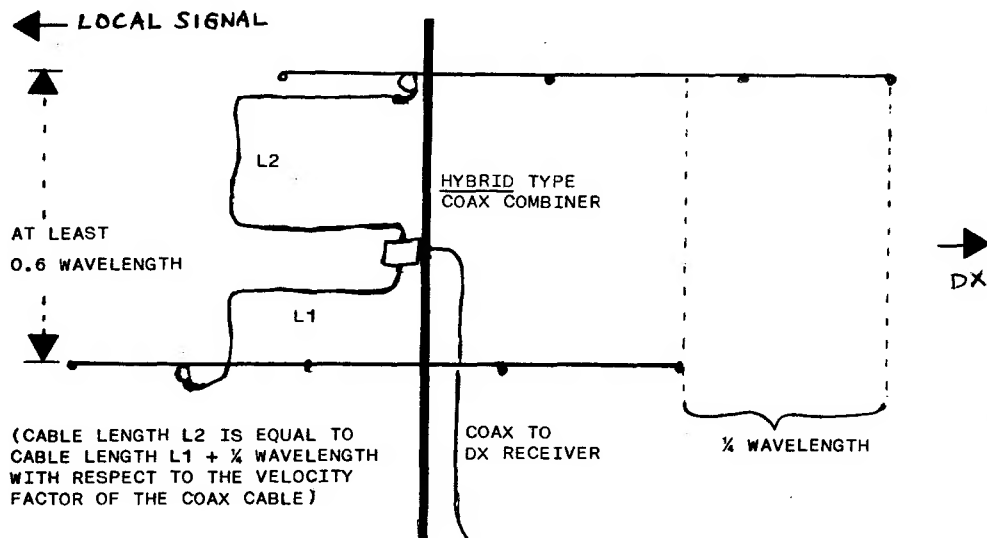
This will give you the amount of staggering distance in inches. Remember, this is equal to $\frac{1}{4}$ wavelength, and is the amount of displacement that the staggered antenna leads the lower antenna by. It is, of course, the exact distance that you will have to know to drill the new holes for the "U" bolts on the antenna boom.

STAGGER STACKING

Here are some suggested staggering distances:

Channel	2	3	4	5	6	88.1	99.9	107.9
Staggering Distance (in.)	52	47	43	37	35	34	30	27

Finally, pay careful attention to how you cut the lengths of coax that run to the combiner. As we said, they are unequal in length, unlike with regular vertical stacking designs. You must use a good quality foam coax, preferably a shielded-foil type. Refer to the diagram below, showing what such an array looks like from the side. Note that cable length L1 can be any reasonable length, as long as you keep it so there's just enough to reach the combiner, running from the balun at the antenna feed point. L2 will be equal to the length of L1 plus one quarter of the wavelength of the signal in the transmission line. Note that this length will not be the same as the one quarter wavelength distance in free space.



This figure will turn out to be --as we noted earlier-- 78% of the distance of a quarter wave in free space.

Be sure to follow good stacking practices as detailed in previous VUD articles, notably the August 1976 issue. This means making sure the coax lengths are cut properly, using identical baluns on the antenna feeds, and also observing polarity of the baluns themselves, so that the signals combine properly. In fact, the combiner you use will be key to the success of the system. Make sure it's a hybrid type coaxial combiner (which allows the signals from the antennas only to add to each other in the proper way--with a high amount of isolation between inputs).

Antenna stacking is always tricky--many have been disappointed by the results because they compromised in the wrong place, or combined antenna outputs improperly. But when it's done right, the results are usually well worth the cost and effort to a DXer. With stagger stacking, you have a way to greatly reduce signal strength of unwanted stations directly in back of the DX. Study your locals closely; if one or more of them are coming from a direction that causes you to miss some good DX coming from a heading 180° apart on the rotor dial, stagger stacking could well be of great use to you.

C.C.I. [UNIDENTIFIED DX]

Robert Grant, KA8PJV.
5775 Bishop
Detroit, MI 48224.
June, 1982.

TV unIDs:
Jim Ayers, Rt. 11, Mockingbird Ln., Murfreesboro, TN 37130.
1981: Fri 19 Jun Es ch 2 1600 CDT-- "Dick Van Dyke Show" (PTA: NE)
" " " " ch 3 1630 CDT-- "Barney Miller"
" " " " ch 3 1741 CDT-- "The Incredible Hulk"
Thu 25 Jun Es ch 3 1730 CDT-- "Eight Is Enough" to 1830
" " " " ch 3 1800 CDT-- "Family Feud"
" " " " ch 3 1830 CDT-- "Tic Tac Dough"
Tue 30 Jun Es ch 3 1030 CDT-- ONT stn w/ "Today Show" but NOT the NBC "Today Show",
not CKVR (PTA: N)
" " " " ch 3 1030 CDT-- "Let's Make A Deal" (PTA: NE)
" " " " ch 2 -- promo- "Littlest Hobo" Thurs. 1930. (PTA: N)
(could be any CTV- Probably CKCO2 -RG)
" " " " ch 4 -- promo- "John Davidson Show" Tue. nights at 11:25.
" " " " ch 2 1126 CDT-- "Donahue w/ "Glascoat" ad. (PTA: NE)

Jim Pizzi, P.O. Box 1778, Lovington, NM 88260.
1981: Sat 10 Oct Tr ch 36 0828-0855 MST-- "This Old House" (PTA: ENE)
Sat 21 Nov Es ch 2 2007 MST-- "Rockford Files" (PTA: WNW)
" " " Es ch 4 2021 MST-- "Lawrence Welk" (PTA: WNW)
Sun 22 Nov Es ch 2 1955 MST-- ad- "KS-94" (PTA: NE)
Mon 30 Nov Es ch 2 2200 MST-- "M*A*S*H"
Sat 12 Dec Es ch 6 1657 MST-- "Happy Days" + offset (PTA: CNT. & surrounding areas)
1982: Fri 1 Jan Es ch 6 1415 MST-- "Three Stooges" (PTA: N thru NE)
Fri 29 Jan Es ch 4 1732 MST-- ID in SS: "La Grinas Neigras- 4" (PTA: S)
Tue 2 Feb Es ch 4 1856 MST-- ID in SS: "Vienietia TV 4" (PTA: S)
Thu 18 Mar Tr ch 34 0239 MST-- movie "Gangs Of New York" w/SS subtitles. ID as XEW-2.
(PTA: SSE)
" " " " ch 53 0349 MST-- "Mike Douglas Show" w/ Carol Burnett on. (PTA: E)
" " " " ch 61 0349 MST-- "Mike Douglas Show" // to ch 53 (both xltres -RG)

Saul Chernos, 79 Ridge Drive, Toronto, ONT M4T 1B6. (at Burnt River, ONT.)
1981: Sun 26 Jul Es ch 6 NO TIME-- ad- "Radio Motors" at "12 & Green" (PTA: SSE)

FM unIDs:
Jim Pizzi, P.O. Box 1778, Lovington, NM 88260.
1982: Fri 1 Jan Es 92.1 1942 MST-- "92 City FM" (Definitely CITI Winnipeg, MB- RG)

Saul Chernos, 79 Ridge Drive, Toronto, ONT M4T 1B6.
at Burnt River:
1981: Sun 26 Jul Es 97.7 or 97.9 NO TIME-- ad "Sheetek Disco" in "K-Town" (PTA: S)
" " " 100.5 1710 EDT-- in French. (PTA: S) (Perhaps a Tr getting in the way? -RG)
Mon 3 Aug Es 97.7 2315 EDT-- in French. (PTA: S)
Thu 6 Aug Es 92.7 NO TIME-- ad- "Appliance Place Two" (PTA: FL)
Tue 11 Aug Ms 97.3 NO TIME-- Milwaukee Brewers BB. (write WLPX. -RG)
Sun 23 Aug Au 101.1 NO TIME-- Gospel Show- "R.W. Stanhaus."
Sun 27 Dec Ms 102.3 or 102.5 NO TIME-- ad- "Van Harens Furniture."

TV IDs:
Robert Grant
1981: Fri 22 May Es ch 2 1753 EDT-- "Hour Magazine" + offset.
(Saul Chernos IDed this as WCED.)

TNX to all for your reports. Special TNX to Saul Chernos for all the radio
program guides he sent me. By the time this appears we will have made a killing
on all the great summer Es and this will no longer be a quaterly column. (I hope.)
73 & gud DX.

COME TO STATEN ISLAND

WORLDWIDE TV-FM DX ASSOCIATION

CONVENTION 1982

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MAKE PLANS NOW to be in the New York City area July 30th through August 1st for FM/TV and PSB's annual DX gettogether. It's WTFDA's 1982 Convention, to be held at Staten Island's Conca del Oro Motel.

We're planning a full program for VHF and UHF DX enthusiasts, to be highlighted by technical demonstrations and station tours. State-of-the-art low noise preamps will be highlighted, and we'll even show you some 3D TV!

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The traditional banquet will be held on Saturday, August 31st, and we'll have an after dinner speaker.

COME TO STATEN ISLAND

1982 WTFDA CONVENTION

Registration fee for the convention will be \$20. Our motel's room rates are very reasonable, and start at less than \$40 per night. The motel site includes a restaurant, and there are many others available nearby.

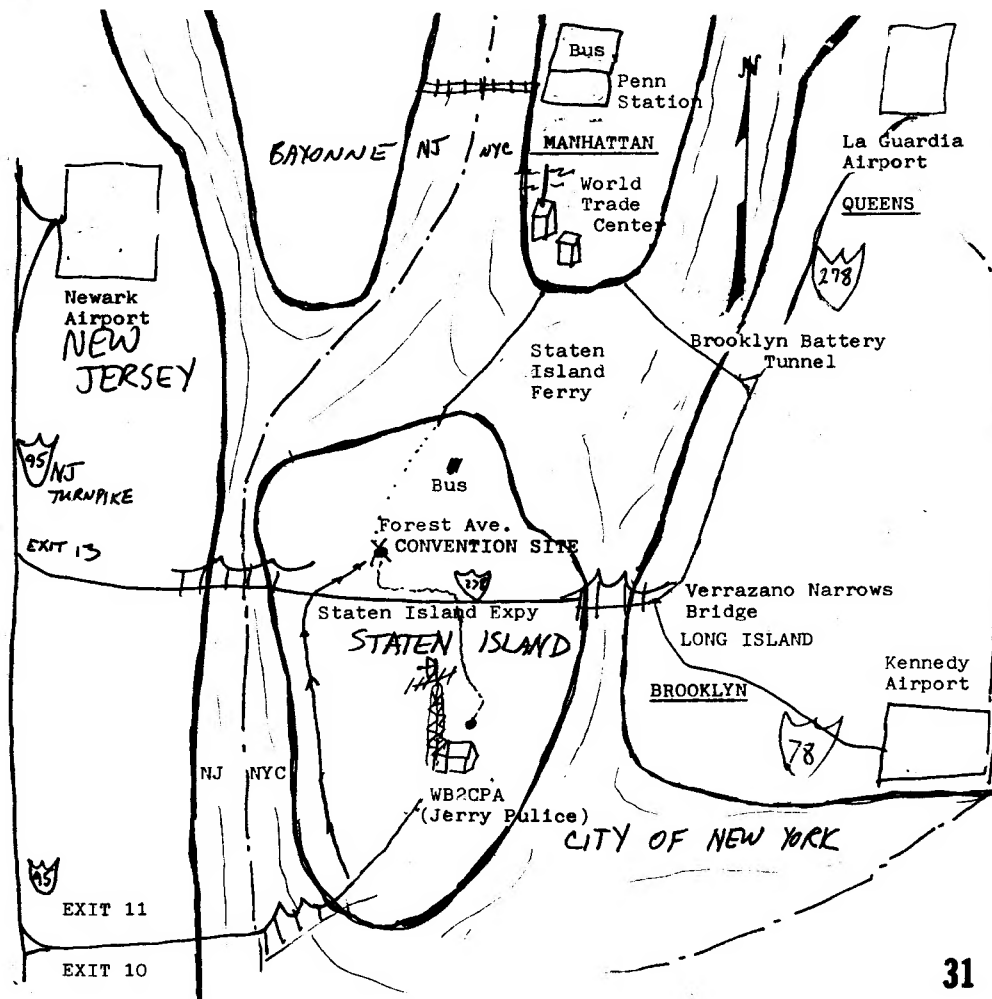
For those planning to travel by air, the closest major airport is Newark International, less than 10 miles away.

For those driving to the site, the motel is located at 2232 Forest Ave., off I-278. To get to Staten Island from I-95, the major Interstate that's known as the New Jersey Turnpike closest to Staten Island, take Exit 13 to I-278, across the Goethals Bridge.

Those planning to arrive via other modes should contact your host:

Jerry Pulice, 3201 Richmond Road, Staten Island, NY 10306 (212) 979-3577.

Don't miss out on this year's convention! If you've never been to one before, you'll see what you've been missing. And, for those not familiar with the Staten Island area, surprise! Free from all the big city confusion of Manhattan, SI is more like a suburban community--there are still farms on the Island. And yet, everything to do and see in New York is just a few miles away. Come to Staten Island--see why you'll love N.Y.!



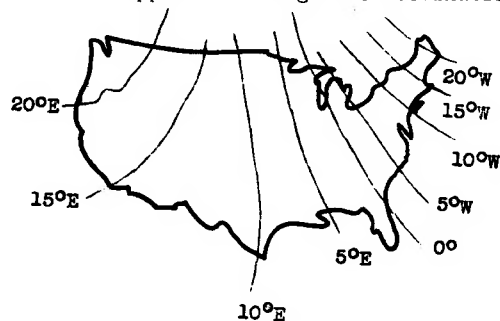
FINDING BEARINGS AND HEADINGS

BY DAVID WILSON

The procedure that follows allows one to calculate the bearing and distance of a transmitter from a receiver given the geographic coordinates (rounded to the nearest minute (')). Coordinates can usually be found from a good atlas, ITU or FCC information, or aeronautical publications. It is designed to be used with a calculator having trigonometric functions sin, cos, and tan (else a table of these may be used). Detailed knowledge of such functions is not needed. A few notes follow:

- For calculator use, latitude and longitude in degrees/minutes must be changed to decimal degrees. To do this, divide the number of minutes (') by 60, then add the number of degrees (°). (Example: 41°09' is 41.15°)
- Latitudes in degrees S (south) and longitudes in degrees E (east) should be treated as negative ones. As long as latitudes are N and longitudes are W, no problems with negative numbers will be encountered.
- If a calculator is used, make sure it is in the degrees (not radians or grad) mode.
- If a compass is used for directing antennas or for determining the direction when direction finding, it must be noted that the magnetic bearing differs from the true bearing (which the following procedure calculates). The amount of the "magnetic declination" or "variation" can be found on U.S. Geological Survey Quadrangle Topographic map for your area. For W declinations, subtract the declination from the magnetic bearing to get the true bearing; add the declination to the true bearing to get the magnetic bearing. For E declinations, add the declination to the magnetic bearing to get the true bearing; and subtract the declination from the true bearing to get the magnetic bearing.

The map below shows approximate magnetic declinations.



FINDING BEARINGS AND HEADINGS

If only the bearing is desired, stop after (23). If only the distance is desired, skip (22) and (23).

- | | | |
|-------------------------|-------|---|
| Example | | |
| 81.35 | _____ | (1) Longitude of receiver W/E-. |
| 41.15 | _____ | (2) Latitude of receiver N/S-. |
| 63.57 | _____ | (3) Longitude of transmitter W/E-. |
| 44.42 | _____ | (4) Latitude of transmitter N/S-. |
| 17.78 | _____ | (5) Find the difference between (1) and (3). |
| 8.89 | _____ | (6) Find half of (5). |
| 85.58 | _____ | (7) Add (2) and (4). |
| 42.79 | _____ | (8) Find half of (7). |
| 3.27 | _____ | (9) Find the difference between (2) and (4). |
| 1.64 | _____ | (10) Find half of (9). |
| 6.3932 | _____ | (11) Divide 1 by the tan of (6). (On some calculators, you can do this by finding the tan of (6), then using the 1/x key) |
| .9996 | _____ | (12) Find the cos of (10). |
| 6.3906 | _____ | (13) Find (11) times (12). |
| .6793 | _____ | (14) Find the sin of (8). |
| 9.4076 | _____ | (15) Find (13) divided by (14). |
| 83.93 | _____ | (16) Find the arc tan of (15). (That is, find the angle whose tan is (15). On some calculators, this will be arc tan, on others, it is inverse (inv) tan.) |
| .0286 | _____ | (17) Find the sin of (10). |
| .1828 | _____ | (18) Find (17) times (11). |
| .7338 | _____ | (19) Find the cos of (8). |
| .2491 | _____ | (20) Find (18) divided by (19). |
| 13.99 | _____ | (21) Find the arc tan (20). (See (16).) |
| 69.94 | _____ | (22) If (4) is greater than (2), find (16) minus (21).
If (2) is greater than (4), find (16) plus (21). |
| 69.94° E
of N | _____ | (23) Line (22) is the bearing relative to 0° North; it is either degrees east (of North) or degrees west (of North). Determine which by a quick glance at a map or globe. (A bearing W of North may be changed to E of North by subtracting it from 360.) |
| .02863 | _____ | (24) Find the tan of (10). |
| .9944 | _____ | (25) Find the sin (16). |
| .02847 | _____ | (26) Find (24) times (25). |
| .2418 | _____ | (27) Find the sin of (21). |
| .1177 | _____ | (28) Find (26) divided by (27). |
| 6.7128 | _____ | (29) Find the arc tan of (28). (See (16).) |
| 13.4256 | _____ | (30) Double (29). |
| 929 mi
or
1495 km | _____ | (31) Multiply (30) by 69.18 to obtain the distance in miles (mi), or by 111.34 to obtain the distance in kilometers (km). |

The example shows that CFH-Halifax, N.S. is 929 mi away at a bearing of about 70° from Kent, OH.)

David Wilson
829 Allerton St.
Kent, OH 44240

we'd like to see from you!

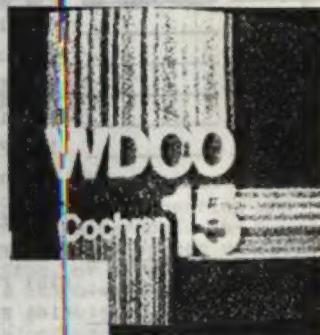


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